

# DSR-40/40P

## SERVICE MANUAL

US Model  
Canadian Model

DSR-40

AEP Model

DSR-40P

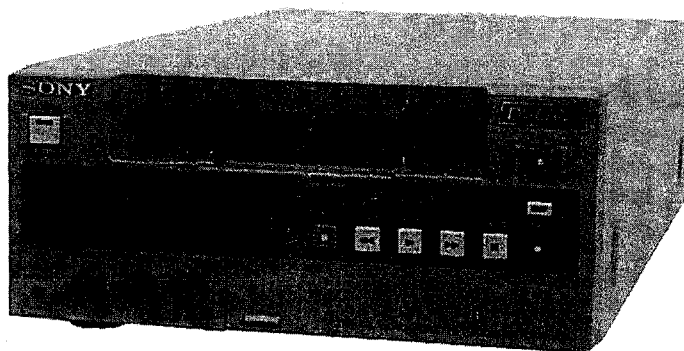


Photo: DSR-40

### SPECIFICATIONS

#### System

Recording format DVCAM format, rotating 2-head helical scan, digital component recording

#### Video signal

DSR-40: EIA STANDARD, NTSC color system

DSR-40P: CCIR STANDARD, PAL colour system

#### Video

Quantification 8-bit

Standardization frequency

DSR-40: 13.5 MHz (4:1:1 Component)

DSR-40P: 13.5 MHz (4:2:0 Component)

#### Audio

Quantification 12-bit (non-linear) or 16-bit (linear)

Standardization frequency

32 kHz (12-bit recording)  
or 48 kHz (16-bit recording)

Usable cassettes Standard-DVCAM cassettes and Mini-DVCAM cassettes

Recording time 184 minutes (when using the PDV-184ME cassette)  
40 minutes (when using the PDVM-40ME cassette)

#### Clock

Quartz locked

DSR-40: 12-hour cycle display

DSR-40P: 24-hour cycle display

Power back-up Built-in self-charging capacitor

Back-up duration: up to 100 hours  
(After 8 hour charges)

#### Inputs and outputs

##### INPUT

S VIDEO: Mini DIN 4-pin

Luminance signal: 1 Vp-p  
(75 ohms unbalanced)

Chrominance signal:

0.286 Vp-p (DSR-40)

0.3 Vp-p (DSR-40P)

(75 ohms unbalanced)

VIDEO: BNC type

Input signal: 1 Vp-p

(75 ohms unbalanced)

AUDIO: Phono jack (L, R)

Input level: 2 Vrms (full bit)

Input impedance: more than  
47 kohms

##### MONITOR

VIDEO: BNC type

Output signal: 1 Vp-p

(75 ohms unbalanced)

AUDIO CH1/3: Phono jack

Output level: 2 Vrms (full bit)

Output impedance: less than  
10 kohms

AUDIO CH2/4: Phono jack

Output level: 2 Vrms (full bit)

Output impedance: less than  
10 kohms

— Continued on next page —



## DIGITAL VIDEO CASSETTE RECORDER



# SONY®

# DSR-40/40P

**SONY**

## SERVICE MANUAL

*US Model  
Canadian Model*

*DSR-40*

*AEP Model  
DSR-40P*

### CORRECTION-1

File this correction with the service manual  
(99-012)

#### CORRECTION OF ELECTRICAL PARTS LIST

#### 6-2. ELECTRICAL PARTS LIST

(See Service Manual Page 6-31)

Page	INCORRECT				CORRECT			
	Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
6-31	△	1-468-377-11	POWER BLOCK (U-2) (DSR-40)		△	1-468-377-11	POWER BLOCK (U-2) (DSR-40)	
	△	1-468-378-11	POWER BLOCK (U-2) (DSR-40P)		△	1-468-378-11	POWER BLOCK (U-2) (DSR-40P)	
	C3	9-880-339-01	FILM	0.047μF	C3	9-880- <del>399</del> -01	FILM	0.047μF
	C14	9-880-339-01	FILM	0.047μF	C14	9-880- <del>399</del> -01	FILM	0.047μF
	C15	9-880-339-01	FILM	0.047μF	C15	9-880- <del>399</del> -01	FILM	0.047μF
	C16	9-880-339-01	FILM	0.047μF	C16	9-880- <del>399</del> -01	FILM	0.047μF
	C17	9-880-339-01	FILM	0.047μF	C17	9-880- <del>399</del> -01	FILM	0.047μF
	C22	9-880-339-01	FILM	0.047μF	C22	9-880- <del>399</del> -01	FILM	0.047μF
	C23	9-880-339-01	FILM	0.047μF	C23	9-880- <del>399</del> -01	FILM	0.047μF
	C24	9-880-339-01	FILM	0.047μF	C24	9-880- <del>399</del> -01	FILM	0.047μF
	C25	9-880-339-01	FILM	0.047μF	C25	9-880- <del>399</del> -01	FILM	0.047μF
	C27	9-880-339-01	FILM	0.047μF	C27	9-880- <del>399</del> -01	FILM	0.047μF
	C41	9-880-339-01	FILM	0.047μF	C41	9-880- <del>399</del> -01	FILM	0.047μF
	C42	9-880-339-01	FILM	0.047μF	C42	9-880- <del>399</del> -01	FILM	0.047μF
	C43	9-880-339-01	FILM	0.047μF	C43	9-880- <del>399</del> -01	FILM	0.047μF

The components identified by mark △ or dotted line with mark △ are critical for safety. Replace only with part number specified.

Les composants identifiés par une marque △ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.



## OUTPUT

**S VIDEO:** Mini DIN 4-pin  
 Luminance signal: 1 Vp-p  
 (75 ohms unbalanced)  
 Chrominance signal:  
 0.286 Vp-p (DSR-40)  
 0.3 Vp-p (DSR-40P)  
 (75 ohms unbalanced)  
**VIDEO:** BNC type  
 1 Vp-p (75 ohms unbalanced)  
**Y:** BNC type  
 1 Vp-p (75 ohms unbalanced)  
**R-Y:** BNC type  
 0.7 Vp-p (75 ohms unbalanced)  
 (DSR-40: 75%, color bar / DSR-40P: 100%, color bar)  
**B-Y:** BNC type  
 0.7 Vp-p (75 ohms unbalanced)  
 (DSR-40: 75%, color bar / DSR-40P: 100%, color bar)  
**AUDIO CH1/3:** XLR 3-pin, male,  
 +4 dBu, 600 ohms loading,  
 balanced.  
**AUDIO CH2/4:** XLR 3-pin, male,  
 +4 dBu, 600 ohms loading,  
 balanced.

## REF. VIDEO INPUT

BNC type  
 1 Vp-p (75 ohms unbalanced)

## CONTROLS

**DV** Minijack  
**REMOTE** 4-pin jack (i.LINK)  
**PHONES** D-sub 9-pin  
 Stereo minijack  
 -2 dBu, 8 ohms, unbalanced  
 (when volume is set to  
 maximum)

## General

### Power requirements

DSR-40: 120 V AC, 60 Hz  
 DSR-40P: 220 - 240 V AC, 50 Hz

### Power consumption

DSR-40: 40 W, 120 V AC, 60 Hz  
 DSR-40P: 40 W, 220 - 240 V AC, 50 Hz  
 (during playback)

### Operating temperature

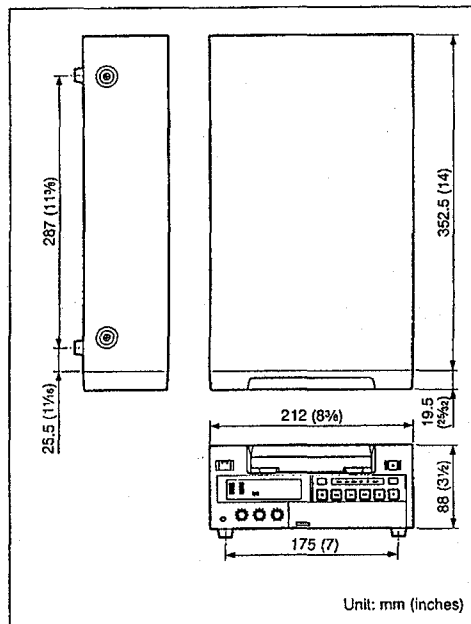
5°C to 40°C (41°F to 104°F)

### Storage temperature

-20°C to +60°C (-4°F to +140°F)

### Dimensions

Approx. 212 × 98 × 392 mm  
 (8 3/8 × 3 7/8 × 15 1/2 inches)  
 (w/h/d, including projecting parts  
 and controls)



Mass Approx. 5 kg (11 lb.)

### Supplied accessories

AC power cord (1)  
 Cleaning cassette (1)

Design and specifications are subject to change  
 without notice.

## SAFETY-RELATED COMPONENT WARNING!!

COMPONENTS IDENTIFIED BY MARK  $\Delta$  OR DOTTED LINE WITH MARK  $\Delta$  ON THE SCHEMATIC DIAGRAMS AND IN THE PARTS LIST ARE CRITICAL TO SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY.

## ATTENTION AU COMPOSANT AYANT RAPPORT À LA SÉCURITÉ!

LES COMPOSANTS IDENTIFIÉS PAR UNE MARQUE  $\Delta$  SUR LES DIAGRAMMES SCHÉMATIQUES ET LA LISTE DES PIÈCES SONT CRITIQUES POUR LA SÉCURITÉ DE FONCTIONNEMENT. NE REMPLACER CES COMPOSANTS QUE PAR DES PIÈCES SONY DONT LES NUMÉROS SONT DONNÉS DANS CE MANUEL OU DANS LES SUPPLÉMENTS PUBLIÉS PAR SONY.

## SAFETY CHECK-OUT

(US Model only)

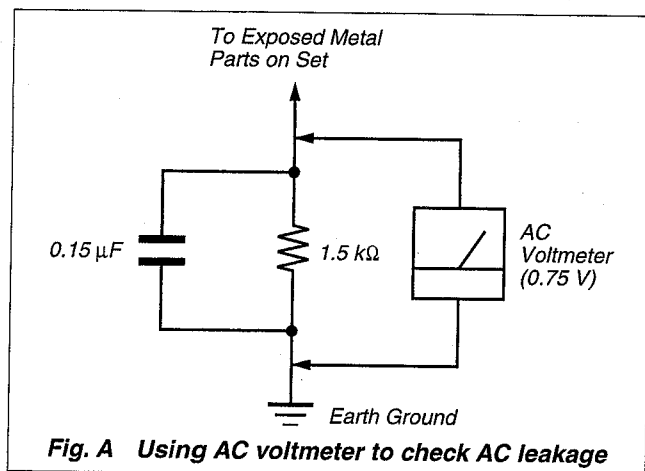
After correcting the original service problem, perform the following safety checks before releasing the set to the customer:

1. Check the area of your repair for unsoldered or poorly-soldered connections. Check the entire board surface for solder splashes and bridges.
2. Check the interboard wiring to ensure that no wires are "pinched" or contact high-wattage resistors.
3. Look for unauthorized replacement parts, particularly transistors, that were installed during a previous repair. Point them out to the customer and recommend their replacement.
4. Look for parts which, though functioning, show obvious signs of deterioration. Point them out to the customer and recommend their replacement.
5. Check the line cord for cracks and abrasion. Recommend the replacement of any such line cord to the customer.
6. Check the B+ voltage to see it is at the values specified.
7. Check the antenna terminals, metal trim, "metallized" knobs, screws, and all other exposed metal parts for AC leakage. Check leakage as described below.

### LEAKAGE TEST

The AC leakage from any exposed metal part to earth ground and from all exposed metal parts to any exposed metal part having a return to chassis, must not exceed 0.5 mA (500 microamperes). Leakage current can be measured by any one of three methods.

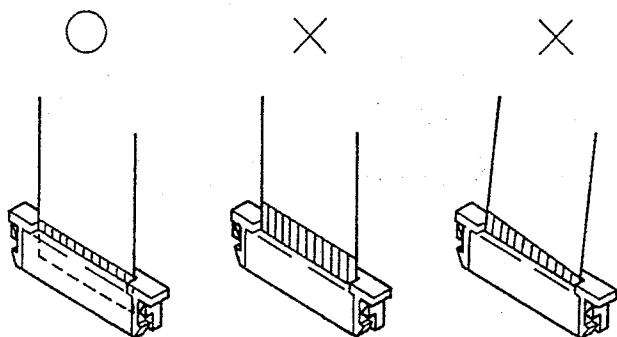
1. A commercial leakage tester, such as the Simpson 229 or RCA WT-540A. Follow the manufacturers' instructions to use these instruments.
2. A battery-operated AC milliammeter. The Data Precision 245 digital multimeter is suitable for this job.
3. Measuring the voltage drop across a resistor by means of a VOM or battery-operated AC voltmeter. The "limit" indication is 0.75V, so analog meters must have an accurate low-voltage scale. The Simpson 250 and Sanwa SH-63Trd are examples of a passive VOM that is suitable. Nearly all battery operated digital multimeters that have a 2V AC range are suitable. (See Fig. A)



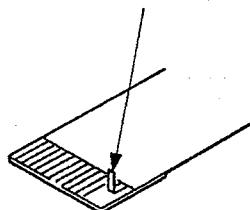
## SERVICE NOTE

- **Note for Repair**

Make sure that the flat cable and flexible board are not cracked or bent at the terminal.  
Do not insert the cable insufficiently nor crookedly.



Cut and remove the part of gilt which comes off at the point.  
(Take care that there is some pieces of gilt left inside.)



## TABLE OF CONTENTS

<u>Section</u>	<u>Title</u>	<u>Page</u>	<u>Section</u>	<u>Title</u>	<u>Page</u>
SERVICE NOTE .....		4			
<b>1. GENERAL</b>					
<b>Features</b> .....		1-1			
Notes on Video Cassettes .....		1-1		RE-33, CB-67 Printed Wiring Boards .....	4-61
Notes on Recording /Playing .....		1-1		RE-33, CB-67 Schematic Diagram .....	4-63
<b>Location and Function of Parts</b> .....		1-2		VA-106 Printed Wiring Board .....	4-66
<b>Playback</b> .....		1-3		VA-106 (IF) Schematic Diagram .....	4-71
Connections for Playback .....		1-3		VA-106 (VIDEO IN) Schematic Diagram .....	4-75
Settings for Playback .....		1-4		VA-106 (VIDEO OUT) Schematic Diagram .....	4-81
Playback Procedure .....		1-4		VA-106 (UVIC, DV IN/OUT) Schematic Diagram ..	4-86
Playback Functions .....		1-4		VA-106 (MONITOR OUT) Schematic Diagram .....	4-89
<b>Recording</b> .....		1-5		VA-106 (HI CON) Schematic Diagram .....	4-92
Connections for Recording .....		1-5		VA-106 (SG SELECT, EVR) Schematic Diagram ..	4-95
Setting for Recording .....		1-5		RS-80 Printed Wiring Board .....	4-97
Recording Procedure .....		1-6		RS-80 Schematic Diagram .....	4-99
<b>Notes on Usage in the Editing System</b> .....		1-7		FR-158 Printed Wiring Board .....	4-103
<b>Connections for a Digital Non-linear Editing</b> .....		1-7		FR-158 Schematic Diagram .....	4-105
<b>Connections for a Cut Editing System</b> .....		1-7		GL-10 Printed Wiring Board .....	4-109
<b>Connections for an A/B Roll Editing System</b> .....		1-8		GL-10 Schematic Diagram .....	4-111
<b>Adjusting an Edit Timing</b> .....		1-9		HP-118 Printed Wiring Board .....	4-116
<b>Adjusting the Sync and Subcarrier Phases</b> .....		1-10		HP-118 Schematic Diagram .....	4-119
<b>Adjusting Signals</b> .....		1-11		CM-56 Printed Wiring Board .....	4-123
<b>Using the Unit as a Recorder</b>				CM-56 Schematic Diagram .....	4-127
<b>with FXE-100/100P/120/120P</b> .....		1-11		MD-63, MD-64, MD-65, FP-406	
<b>Changing Menu Settings</b> .....		1-12		Printed Wiring Boards .....	4-132
Changing the SET UP MENU Settings .....		1-12		MD-63, MD-64, MD-65, FP-406	
Menu Contents .....		1-12		Schematic Diagram .....	4-135
Recommended Settings in the SET UP Menu .....		1-13		U-1 Printed Wiring Board .....	4-137
<b>Alarm Messages</b> .....		1-13		U-1 Schematic Diagram .....	4-138
				U-2 Printed Wiring Board .....	4-141
				U-2 Schematic Diagram .....	4-142
<b>2. DISASSEMBLY</b>			<b>5. ADJUSTMENTS</b>		
2-1. Removal of Upper Case .....		2-1	5-1. MECHANICAL SECTION ADJUSTMENTS .....		5-1
2-2. Removal of Front Panel Assembly .....		2-1	5-1-1. Information .....		5-1
2-3. Removal of VA-106 Board .....		2-1	1-1. How to Search Reference Pages for Removal .....		5-1
2-4. Removal of Power Block .....		2-1	1-2. Phase Adjustment Mark "PH-" .....		5-1
2-5. Removal of MD Block Assembly .....		2-2	5-1-2. Preparation for Mechanical Check,		
2-6. Removal of CM-56 Board .....		2-2	Adjustment and Maintenance .....		5-2
2-7. Removal of JC-19 Board .....		2-2	2-1. FL Block Assembly .....		5-2
2-8. Removal of RP-228 Board .....		2-2	2-2. Cassette Positions .....		5-2
2-9. Circuit Boards Location .....		2-3	2-3. Loading/Unloading .....		5-3
			2-4. Manual Up/Down the FL Block .....		5-3
			2-5. Service Jigs List .....		5-4
			5-1-3. Phase Adjustments .....		5-6
			3-1. Phase Adjustment		
			(Loading/Unloading Driving Section) .....		5-6
			3-2. Phase Adjustment		
			(S/L Cassette Selection Section) .....		5-8
			3-3. Phase Adjustment		
			(Mechanism Chassis Upper Surface Parts) .....		5-10
			5-1-4. Periodic Check and Maintenance .....		5-12
			4-1. Cleaning of Rotary Drum Assembly .....		5-12
			4-2. Cleaning of Tape Path System .....		5-12
			4-3. Periodic Checks .....		5-13
			5-1-5. Mechanism Section Checks and Replacements ...		5-14
			5-1. Tape Stopper, Motor FPC Assembly and		
			Elastic Connector .....		5-14
			5-2. Drum Assembly and Drum Base .....		5-14
			5-3. LM Cover, LM Worm Wheel, LM Holder and		
			LM Motor Assembly .....		5-15
			5-4. TG3/4 Catcher Block Assembly,		
			Pinch Driving Gear and TC Arm Assembly .....		5-15
			5-5. Pinch Arm Assembly, Pinch Limiter and		
			Tension Coil Spring (Pinch) .....		5-16
			5-6. HC Arm, HC Roller Assembly,		
			Pinch Retainer, Pinch Cam Gear and		
			TG5/6 Catcher Block Assembly .....		5-16
			5-7. RL Arm and RL Link .....		5-17
			5-8. Gooseneck Guard and Gooseneck Arm Assembly		5-17
			5-9. Tension Coil Spring (TG2), Spring Adjustor,		
			TG2 Spring Hook, TG2 Selection Arm and Damper		
			Sheet .....		5-18
			5-10. Tension Coil Spring (TG7), Spring Adjustor and		
			TG7 Spring Hook .....		5-18
<b>3. BLOCK DIAGRAMS</b>					
3-1. Overall Block Diagram 1 .....		3-1			
3-2. Overall Block Diagram 2 .....		3-7			
3-3. Overall Block Diagram 3 .....		3-11			
<b>4. PRINTED WIRING BOARDS AND SCHEMATIC DIAGRAMS</b>					
4-1. Frame Schematic Diagram .....		4-1			
4-2. Printed Wiring Boards and Schematic Diagrams .....		4-5			
• RP-228 Printed Wiring Board .....		4-5			
• RP-228 Schematic Diagram .....		4-9			
• JC-19 Printed Wiring Board .....		4-15			
• JC-19 (AD/DA CONVERTER)					
Schematic Diagram .....		4-19			
• JC-19 (S1 AFC) Schematic Diagram .....		4-25			
• JC-19 (U1) Schematic Diagram .....		4-29			
• JC-19 (D1) Schematic Diagram .....		4-34			
• JC-19 (C1 SPCON) Schematic Diagram .....		4-37			
• JC-19 (MODE) Schematic Diagram .....		4-41			
• JC-19 (DV IN/OUT) Schematic Diagram .....		4-45			
• JC-19 (AUDIO CORE) Schematic Diagram .....		4-50			
• JC-19 (DIGITAL AUDIO) Schematic Diagram .....		4-53			
• JC-19 (AUDIO D/A, A/D CONVERTER)					
Schematic Diagram .....		4-58			

<u>Section</u>	<u>Title</u>	<u>Page</u>	<u>Section</u>	<u>Title</u>	<u>Page</u>
5-11.	TG2 Retainer, TG2 Arm Assembly (TG2 Plate Spring and ET Magnet), S Tension Regulator Band Assembly and TG2 Load Arm Assembly .....	5-19	3-1-3.	Adjusting Connectors (RP 228 Board CN775) .....	5-59
5-12.	TG7 Retainer, TG7 Arm Assembly (TG7 Plate Spring and ET Magnet), T Tension Regulator Band Assembly and TG7 Load Arm Assembly .....	5-20	3-1-4.	Checking the Input Signals .....	5-60
5-13.	S Reel Table Block Assembly .....	5-21	1.	S Video Input .....	5-60
5-14.	T Reel Holder and T Reel Table Block Assembly ..	5-22	2.	Video Input .....	5-60
5-15.	S Reel Plate Assembly .....	5-22	3-1-5.	Alignment Tapes .....	5-61
5-16.	T Reel Plate Assembly .....	5-24	3-1-6.	Input/Output Level and Impedance .....	5-62
5-17.	TG1/8 Base Assembly, S Brake and T Ratchet .....	5-25	3-2.	Power Supply System Adjustment .....	5-62
5-18.	TG3/6 Roller Assembly and TG3/6 Lock Spring ....	5-26	1.	Power Supply Voltage Check, Power Block (U-2 Board) .....	5-62
5-19.	FL Joint Gear, TG5/6 Retainer and Capstan Motor .....	5-26	2.	Video/Audio Block Power Supply Voltage Check, Power Block (U-2 Board) .....	5-62
5-20.	FL Selection Arm, FL Relay Gear and FL Joint Arm Assembly .....	5-27	3-3.	System Control System Adjustment .....	5-63
5-21.	Rotary Switch, TC Gear and Relay Gear .....	5-27	1.	Initializing the C, D, E Page Data .....	5-63
5-22.	GL Arm Retainer and GL Arm .....	5-28	2.	Input of C Pge Initial Data .....	5-63
5-23.	M Slider and M Slider Arm .....	5-28	3.	Input of D Pge Initial Data .....	5-63
5-24.	TG7 Selection Arm, TG7 Cam Gear and T Cam Gear .....	5-28	4.	Input of E Pge Initial Data .....	5-63
5-25.	Main Cam, TG2 SL Arm Assembly and Tension Coil Spring (TG2 SL) .....	5-29	5.	Modification of C, D, E Page Data .....	5-63
5-26.	TG3/4 Arm Block Assembly (TG3/4 Arm Assembly, TG3/4 Limiter Spring and TG3/4 Gear), TG3/4 Base Block Assembly (TG3/4 Base Assembly) .....	5-30	6.	Page C Address List .....	5-64
5-27.	TG5/6 Arm Block Assembly (TG5/6 Arm Assembly, TG5/6 Limiter Spring and TG5/6 Gear), TG5/6 Base Block Assembly (TG5/6 Base Assembly) .....	5-32	7.	Page D Address List .....	5-64
5-28.	Reel Motor .....	5-34	8.	Page E Address List .....	5-65
5-29.	RS Arm Assembly .....	5-34	3-4.	Servo System Adjustments .....	5-66
5-30.	RS Gear Assembly, Mic Press Spring and Mic Lever .....	5-34	1.	Switching Position Adjustment (CM-56 Board) .....	5-66
5-31.	Rack Joint Gear, Rack Holder, Mic Holder, Rack (LC) and Rack (SC) .....	5-35	2.	Capstan FG Duty Adjustment (CM-56 Board) .....	5-66
5-32.	Plate Link Assembly .....	5-36	3-5.	Video System Adjustments .....	5-67
5-33.	Roller Shaft Assembly and Roller Belt .....	5-38	3-5-1.	RP-228 Board Adjustments .....	5-67
5-34.	Lid Opener .....	5-39	1.	Recording Current Adjustment (RP-228 Board) ....	5-67
5-35.	C Door .....	5-40	2.	PLL fo Adjustment (RP-228 Board) .....	5-67
5-36.	Damper Arm and Tension Spring (DB) .....	5-40	3.	CLK Delay Adjustment (RP-228 Board) .....	5-68
5-37.	Gear (A), Gear (B), and C Worm .....	5-40	4.	AGC Center Level Adjustment (RP-228 Board) ....	5-68
5-38.	Tension Coil Spring (HS), Tension (DB), Shift Plate Spring and C Sloat Block Assembly .....	5-41	5.	AEQ Adjustment (RP-228 Board) .....	5-69
5-1-6.	Adjustments and Checks .....	5-42	6.	PLL Capture Range Adjustment (RP-228 Board) .....	5-70
6-1.	Adjustment Position .....	5-42	7.	IC774 41.85 MHz VCO Check (RP-228 Board) ....	5-70
6-2.	Adjustment Order .....	5-43	3-5-2.	JC-19 Board Adjustments .....	5-71
6-3.	Adjustment and Checking Method .....	5-44	1.	A/D Converter Reference Voltage Adjustment 1 (JC-19 Board) .....	5-71
6-3-1.	Reel Table Height Adjustment .....	5-44	2.	A/D Converter Reference Voltage Adjustment 2 (JC-19 Board) .....	5-71
6-3-2.	TG2/TG7 Height Adjustment .....	5-45	3.	Y Signal Clamp Reference Voltage Adjustment (JC-19 Board) .....	5-71
6-3-3.	FWD/RVS Position Adjustment .....	5-45	4.	CR Signal Clamp Reference Voltage Adjustment (JC-19 Board) .....	5-71
6-3-4.	TG2/TG7 Electric Tension Regulator Adjustment ..	5-46	5.	CB Signal Clamp Reference Voltage Adjustment (JC-19 Board) .....	5-71
6-3-5.	FWD/RVS Back Tension Adjustment .....	5-48	6.	Playback Y Signal Level Adjustment (JC-19 Board) .....	5-72
6-3-6.	Adjustment Preparations and RF Waveform Check .....	5-49	7.	Playback CR Signal Level Adjustment (JC-19 Board) .....	5-72
6-3-7.	Tracking Adjustment .....	5-50	8.	Playback CB Signal Level Adjustment (JC-19 Board) .....	5-73
6-3-8.	Tracking Check .....	5-51	9.	IC422 27MHz XTAL fo Adjustment (JC-19 Board) ..	5-73
6-3-9.	CUE and REV Check .....	5-52	10.	AFC Preliminary Adjustment (JC-19 Board) .....	5-73
6-3-10.	Rising Check .....	5-53	11.	AFC Picture Frame Adjustment (JC-19 Board) ....	5-74
6-3-11.	Tape Path Check .....	5-54	12.	AFC Adjustment (JC-19 Board) .....	5-74
5-2.	SERVICE MODE .....	5-55	3-5-3.	General Adjustments .....	5-75
5-2-1.	Adjusting Remote Commander .....	5-55	1.	Playback Y/CR Delay Adjustment (VA-106 Board) .....	5-75
1.	Used Adjustment Remote Commander .....	5-55	2.	Playback Y/CB Delay Adjustment (VA-106 Board) .....	5-75
2.	Precautions Upon Using The Adjusting Remote Commander .....	5-55	3.	Playback Y Signal Level Adjustment (VA-106 Board) .....	5-76
5-2-2.	Data Processing .....	5-56	4.	Playback Y Setup Level Adjustment (VA-106 Board) .....	5-76
5-2-3.	Service Mode .....	5-57	5.	Playback CR Signal Level Adjustment (VA-106 Board) .....	5-77
1.	Emergence Memory Address .....	5-57	6.	Playback CB Signal Level Adjustment (VA-106 Board) .....	5-77
1-1.	EMG Code (Emergency Code) .....	5-57	7.	Playback Sync Level Adjustment (VA-106 Board) .....	5-78
5-3.	VIDEO SECTION ADJUSTMENTS .....	5-58	8.	Playback Carrier Balance Adjustment (VA-106 Board) .....	5-78
3-1.	Preparations Before Adjustment .....	5-58	9.	Playback Burst Level Adjustment (VA-106 Board) .....	5-79
3-1-1.	Equipment Used .....	5-58			
3-1-2.	Connection of Equipment .....	5-58			

<u>Section</u>	<u>Title</u>	<u>Page</u>
10.	Playback Composite Video Chroma (R-Y Signal Level) Adjustment (VA-106 Board) .....	5-80
11.	Playback Composite Video Chroma (B-Y Signal Level) Adjustment (VA-106 Board) .....	5-80
12.	Playback Composite Video Chroma (R-Y Phase) Adjustment (VA-106 Board) .....	5-81
13.	INT Subcarrier Frequency Adjustment (GL-10 Board) .....	5-81
14.	Decoder Freerunning Frequency Adjustment (VA-106 Board) .....	5-81
15.	Recording Y/CR Delay Adjustment (VA-106 Board) .....	5-82
16.	Recording Y/CB Delay Adjustment (VA-106 Board) .....	5-82
17.	Recording Y Signal Level Adjustment (VA-106 Board) .....	5-83
18.	Recording Chroma Decoder HUE Adjustment (VA-106 Board) .....	5-83
19.	Recording CR Signal Level Adjustment (VA-106 Board) .....	5-84
20.	Recording CB Signal Level Adjustment (VA-106 Board) .....	5-84
21.	SYNC Position Adjustment (GL-10 Board) .....	5-85
22.	EXIT Subcarrier Phase Adjustment (GL-10 Board) .....	5-85
23.	Burst Position Adjustment (GL-10 Board) .....	5-86
24.	Y/C Separation Adjustment (VA-106 Board) .....	5-86
25.	OSD1 Subcarrier Adjustment (VA-106 Board) .....	5-87
26.	OSD2 Subcarrier Adjustment (VA-106 Board) .....	5-87
3-5-4.	BIST Check .....	5-88
1.	Playback System Check (JC-19, RP-228 Boards) .....	5-88
2.	Record System Check .....	5-89
3-6.	Audio System Adjustments .....	5-90
1.	E-E Level Check .....	5-90
2.	Playback Level/Indicator Check .....	5-90
3.	Recording/Playback Check (Audio Lock Mode) ....	5-91
3-7.	Arrangement Diagram for Adjustment Parts .....	5-92

## 6. REPAIR PARTS LIST

6-1.	Exploded Views .....	6-1
6-1-1.	Overall Assembly .....	6-1
6-1-2.	Chassis Assembly .....	6-2
6-1-3.	MD Block Assembly .....	6-3
6-1-4.	FL Cassette Compartment Assembly .....	6-4
6-1-5.	Mechanism Chassis Assembly (1) (Top Side View (1)) .....	6-5
6-1-6.	Mechanism Chassis Assembly (2) (Top Side View (2)) .....	6-6
6-1-7.	Mechanism Chassis Assembly (3) (Top Side View (3)) .....	6-7
6-1-8.	Mechanism Chassis Assembly (4) (Bottom Side View (1)) .....	6-8
6-1-9.	Mechanism Chassis Assembly (5) (Bottom Side View (2)) .....	6-9
6-2.	Electrical Parts List .....	6-10
	Hardware List .....	6-48

## SECTION 1 GENERAL

This section is extracted from DSR-40/40P instruction manual.

### Features

The DSR-40/40P is a 1/4-inch digital videocassette recorder that uses the DVCAM digital recording format. This system achieves stable, superb picture quality by digitally processing video signals that are separated into color difference signals and luminance signals (component video). When connected to Sony Edit Station™, the unit serves as part of powerful non-linear editing system<sup>1)</sup>. The unit is equipped with a full-fledged analog interface, to support hybrid systems that combine conventional analog equipment with digital equipment.

The DSR-40/40P's main features are described below.

#### DVCAM Format

DVCAM is based on the consumer DV format, which uses the 4:1:1 component digital format (DSR-40) or the 4:2:0 format (DSR-40P), and provides a 1/4-inch digital recording format for professional use.

#### High picture quality, high stability

Video signals are separated into color difference signals and luminance signals, which are encoded and compressed to one-fifth size before being recorded to ensure stable and superb picture quality. Because the recording is digital, multi-generation dubbing can be performed with virtually no deterioration of quality.

#### Wide track pitch

The recording track pitch is 15 µm, fully 50 percent wider than the DV format's 10-µm track pitch. Thanks to this feature, the DVCAM format sufficiently meets the reliability and precision requirements of professional editing.

#### 1) Non-linear editing

This is an editing method that uses video and audio signals that have been digitally encoded and recorded on a hard disk as digital data. When compared with conventional (linear) editing methods, non-linear editing offers vastly improved efficiency in editing operations, such as by eliminating tape transport time.

#### High-quality PCM digital audio

PCM recording makes for a wide dynamic range and a high signal-to-noise ratio, thereby enhancing sound quality.

There are two recording modes: 2-channel mode (48-kHz sampling and 16-bits linear code), which offers sound quality equivalent to the DAT (Digital Audio Tape) format, or 4-channel mode (32-kHz sampling and 12-bits nonlinear code).

#### Playback compatibility with DV format

A DV cassette recorded on a DV-format VCR can be played back on this unit. (Cassettes recorded in LP mode cannot be played back.)

#### Choice of two cassette sizes

The unit can use both standard-size and mini-size DVCAM cassettes.

- According to cassette size, it automatically changes the position of the reel drive plate.
- The maximum recording/playback times are 184 minutes for standard size cassettes and 40 minutes for mini-size cassettes.

#### Facilities for High-efficiency Editing

The unit provides an abundance of functions that enhance editing efficiency and precision.

#### Remote control

The unit can be operated by remote control from an editing controller that supports the RS-422A interface or from a SIRC<sup>SM</sup>-system remote control unit such as the optional DSRM-10, or DSRM-20.

- 2) SIRC<sup>SM</sup> (Sony Integrated Remote Control System)  
A command protocol to remote control Sony professional videocassette recorders/players.

#### High-speed search function

If you use the optional remote control unit, the unit has a picture search function that allows you to view color picture at playback speeds up to 14 times normal speed (DSR-40) or 17 times normal speed (DSR-40P) in forward and reverse directions.

When remote-controlling this unit in shuttle mode from an editing controller or a remote controller, you can search at any speed in the range 0 (still) to 14 times normal (DSR-40) or 17 times normal (DSR-40P) in both directions. You can also search frame-by-frame in jog mode. You can also hear playback audio.

#### Jog audio function

If you use the optional remote control unit, audio can be monitored at various playback speeds when in jog mode. The audio signals are once stored in memory and then played back at the same rate as the search speed. This allows you to use audio playback to find the desired edit points.

#### Other Features

##### Analog output interfaces

The unit comes with analog output interfaces enabling it to be connected to analog video and audio equipment.

- Analog video: Include composite video, component video (Y/R-Y/B-Y), and S-video outputs.
- Analog audio: The XLR-type (3-pin) analog audio outputs are provided.

##### "Power-on playback" function (in repeat playback mode)

You can start playback immediately when the unit turns on.

#### Compact size

The unit achieves compact size suitable for using on a demonstration or a bridal. The unit is also equipped with basic functions that are needed for videocassette recorders and players used in professional digital video editing systems.

#### Menu system for functionality and operation settings

The unit provides a menu system to make its various functions easier to use and set up its operation conditions.

#### Superimposition function

Time code, operation mode indications, menus, alarm messages, and other text data can be superimposed and output in analog composite video signals.

#### Easy maintenance function

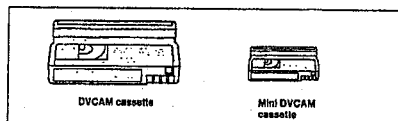
The unit's digital hours meter functions include two kinds of tally operations for head drum usage hours, and tape threading/unthreading times. The tally results can be viewed on the video monitor.

### Features

#### Notes on Video Cassettes

##### Usable cassettes

Use Standard-DVCAM cassettes or Mini-DVCAM cassettes with this VCR. PDV-184ME can record programs for 184 minutes and PDVM-40ME can record for 40 minutes. You can get the highest quality pictures with this digital videocassette recorder using DVCAM cassettes. You may not be able to get as good quality with other cassettes. We recommend using DVCAM cassettes so that you can record your one-time events in highest quality.

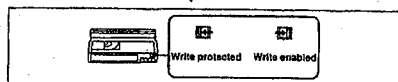


##### Cassette memory

Cassette memory is an optional feature that is mounted on some Standard DVCAM cassettes and Mini DVCAM cassettes. When you record a program, the recording date and time, and the programs' position on the tape are stored in the cassette memory so that you can quickly locate the program later on. CH16K indicates that you can use the cassettes 16 Kbits of data can be stored on. On this VCR, you can use the cassettes up to 16 Kbits of data can be mounted on.

##### To save a recording

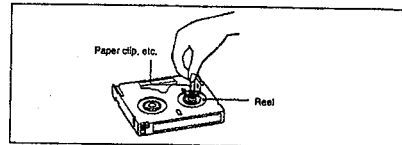
To prevent accidental erasure of a recording, slide in the safety switch on the cassette so that the red portion becomes visible. To record on a tape, slide out the switch so that the red portion is hidden.



Note  
DVCAM<sup>SM</sup>, DV<sup>SM</sup>, DV<sup>SM</sup> and CH<sup>SM</sup> are trademarks.

##### Checking the tape for slack

Using a paper clip or a similar object, turn the reel gently in the direction shown by the arrow. If the reel does not move, there is no slack. Insert the cassette into the cassette compartment, and after about 10 seconds take it out.



##### Notes on Recording / Playing

##### Copyright precautions

###### On recording

You cannot record any software having copyright protection signals on this VCR. If you start recording protected video and audio signals, a warning message appears on the monitor screen and the VCR stops recording.

###### On playback

When you play back software having copyright protection signals on this VCR, you may not be able to copy it onto other equipment.

##### Limitations caused by the difference in format

This VCR can record, play back and edit the tapes recorded in DVCAM format. It can also play back the tapes recorded in DV format (SP mode). However, due to the difference in format, you may not be able to record or edit some tapes affected by recording conditions of the tape (e.g., a tape originally recorded in DV format is dubbed in DVCAM format). For details, refer to "Compatibility of DVCAM and DV format" on page 62.

##### No compensation for contents of the recording

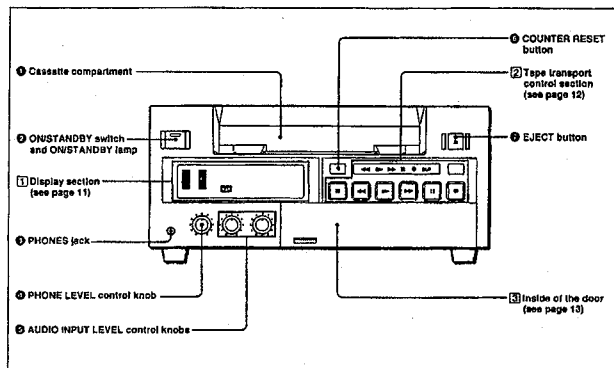
Contents of the recording cannot be compensated for if recording or playback is not made due to a malfunction of the VCR, video tape, etc.

###### Note

You cannot play back a DVCAM tape recorded in other color systems on this VCR.

## Location and Function of Parts

### Front Panel



#### 1 Cassette compartment

Accepts standard-size or mini-size DVCAM digital videocassettes. When using a mini-size cassette, insert it into the center of the compartment.  
For details of usable cassettes, see page 8.

**ON/STANDBY switch and ON/STANDBY lamp**  
Press this switch to turn on the power, and the ON/STANDBY lamp lights in green. Press it again to turn to standby mode, and the lamp lights in red.

#### Note

When the REMOTE/LOCAL switch is set to REMOTE, you cannot turn the unit to standby mode.

#### PHONES jack (stereo minijack)

Connect stereo headphones for headphone monitoring during recording or playback.  
The audio signal you want to monitor can be selected with the AUDIO MONITOR selector inside of the door (3).

#### PHONE LEVEL control knob

Controls the volume of the headphones connected to the PHONES jack.

#### AUDIO INPUT LEVEL control knobs

When recording, you can use these knobs to set audio input levels for CH-1 (channel 1) and CH-2 (channel 2), respectively.

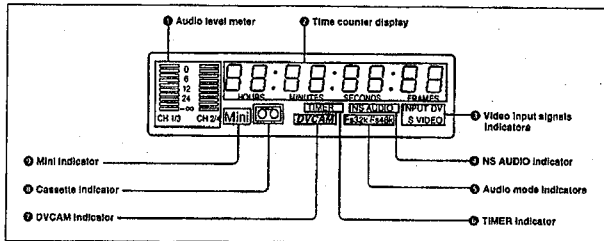
#### COUNTER RESET button

Press this button to reset the tape counter in the display window to "0:00:00 (0h00m00s)". This button does not work when displaying the time code or the remaining time.

#### EJECT button

Press this button to eject a cassette.

### 1 Display section



#### Audio level meter

Indicates the recording level during recording or EE mode, and the playback level during playback. When the audio level exceeds 0 dB, the red indicator lights.

#### Note

If you play back the tape whose audio was only recorded on channel 2, the audio level meter for CH2/4 may not function.

#### Time counter display

Indicates the following:

- Time data: count value of the time counter, time code and remaining time.
- Alarm messages (see page 55).
- Messages for self-diagnosis function (see page 59).

#### Notes

- For DSR-40P: Time code is set to the non drop frame mode only.
- Time code is indicated as follows:  
Drop frame: "00:00:00-00" (DSR-40 only)  
Non drop frame: "00:00:00.00"

#### Video input signals indicators

Indicates the currently selected video input signals. INPUT VIDEO, INPUT S VIDEO, or INPUT DV lights.

#### NS (Non Standard) AUDIO indicator

Lights when the VCR plays back a tape whose audio recording was made in the unlock mode, or when unlock mode signals are input through the DV jack.  
For details of unlock mode, see page 62.

#### Audio mode indicators

Indicates the audio mode during playback or recording or while in EE mode.

- During playback it indicates the audio mode in which the tape was recorded.
- During recording or while in EE mode, it indicates the currently selected audio recording mode. You can select audio recording mode by setting "AUDIO MODE" menu (see page 53).
- FS32k: Lights when playing the tapes recorded in 4-channel mode, or recording a tape in 4-channel mode.
- FS48k: Lights when playing the tapes recorded in 2-channel mode, or recording a tape in 2-channel mode.

#### Note

When recording in 4-channel mode on this VCR, audio signals are recorded only in channels 1/2.

#### TIMER indicator

Lights when setting the TIMER switch to REPEAT.

#### DVCAM indicator

Lights except playing back the DV-formatted tapes.

#### Cassette indicator

Lights when inserting a digital video cassette available for this VCR. It flashes when ejecting a cassette.

#### Mini indicator

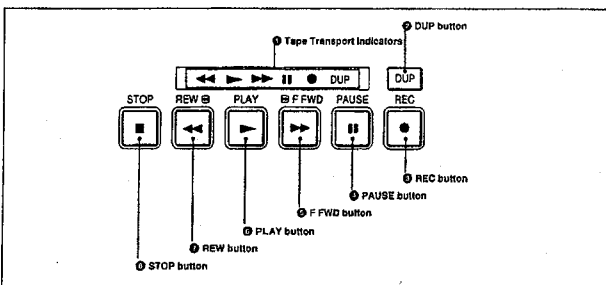
Lights when inserting mini-size digital video cassette.

## Location and Function of Parts

### 2 Tape transport control section

#### Note

When the tape reaches to its beginning or its end by rewinding or fast-forwarding, the unit turns to playback pause mode. Then, the playback pause mode is released after the time which is set at "STILL TIMER" menu (See page 52).



#### Tape Transport indicators

**DUP (duplicate) button**  
Use this button to make a work tape having the same time codes as the source tape.  
For details on duplication, see page 28.

#### REC (record) button

When you press the PLAY button while holding down this button, the indicator lights and recording begins. To set the VCR to recording pause mode, press the PAUSE button while holding down this button.

#### PAUSE button

When you press this button, the indicator lights, and the VCR is set to pause mode.

#### F FWD (fast forward) button

When you press this button, the indicator lights and the tape is fast forwarded. During fast forward, the picture does not appear on the monitor (you can see the picture of the EE mode during fast forward). To search forward, hold this button down during fast forward.

#### PLAY button

When you press this button, the indicator lights and playback begins.  
If you press this button while holding down the REW button during stop, the tape is rewound to its beginning and starts playing automatically (during rewind, the REW indicator lights and the PLAY indicator flashes).

#### REW (rewind) button

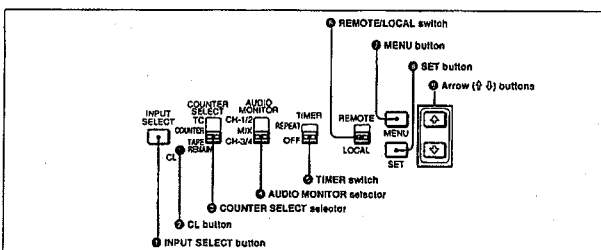
When you press this button, the indicator lights and the tape starts rewinding. During rewind, the picture does not appear on the monitor (you can see the picture of the EE mode during rewind). To search backward, hold this button down during rewind.

If you press the PLAY button while holding down this button during stop, the tape is rewound to its beginning and starts playing automatically (during rewind, the REW indicator lights and the PLAY indicator flashes).

#### STOP button

Press this button to stop the current tape transport operation.

### 3 Inside of the door



#### INPUT SELECT button

Selects input signals. Each press of this button cycles through three video signal selection options: video, S-video, and DV input. When you select one of these options, the corresponding indicator in the display lights up.

#### CL (Clear) button

Press this button to make the unit to the state of reconnecting the AC power cord. When you press this button, the setting in the menu is not initialized.

#### COUNTER SELECT selector

Select the type of time data in the time counter display.  
TC: Time code  
COUNTER: Count value of the time counter  
TAPE REMAIN: Remaining time

#### AUDIO MONITOR selector

Use to select the audio track you want to hear when playing back a tape recorded in 4-channel mode (FS32k).  
CH-1/2: Channels 1/2 only  
MIX: Channels 1/2 and channels 3/4 (mix)  
CH-3/4: Channels 3/4 only

#### TIMER switch

Use to select Auto Repeat using an external AC timer (not supplied).

**REPEAT:** When the power is supplied to this VCR, a tape rewinds to its beginning automatically and playback starts. The VCR repeats the playback from the beginning to the first index (if there is no index on the tape, to the unrecorded portion; if no unrecorded portion, to the tape end). Auto repeat also functions if you set this switch to REPEAT during playback.  
**OFF:** Auto Repeat is released.

#### REMOTE/LOCAL switch

Selects whether the unit is operated from its front panel or from external (remote) equipment.

**REMOTE:** The unit is operated from an editing controller connected to the REMOTE connector. Available tape transport buttons (on the front panel or optional remote control unit) are set in the menu.

**LOCAL:** The unit is operated from its front panel, or from a SIRCS-system remote control unit connected to the CONTROL S jack.



## Location and Function of Parts

### 7 MENU button

Press this button to display the menu on the monitor screen. Press it again to return from the menu display to the usual display.

### Note

If you set the REMOTE/LOCAL switch to REMOTE while the menu display is on the monitor, it returns to the usual display.

On how to use the menu, see Chapter 5 "Menu Settings".

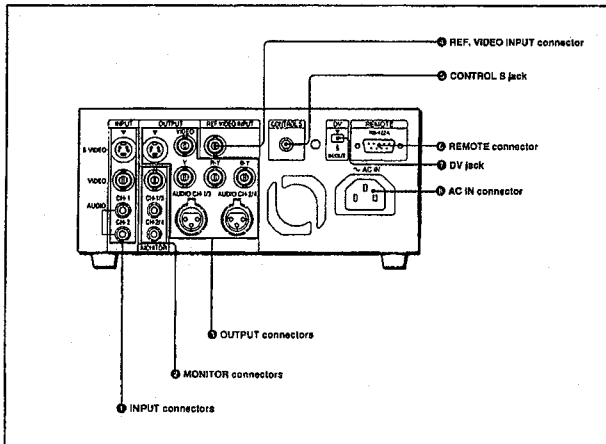
### 8 SET button

Press this button to save selected menu items to the unit's memory.

### 9 Arrow (↑ ↓) buttons

Use these buttons to move around the menu items.

## Rear Panel



### 1 INPUT connectors

Input video and audio signals. To connect a VCR equipped with the S-video output jack, use the S VIDEO jack on this VCR.

### 2 MONITOR connectors

Output video and audio signals for monitoring.

### 3 OUTPUT connectors

Output video and audio signals. To connect a VCR equipped with the S-video input jack, use the S VIDEO jack on this VCR. To connect a VCR equipped with the component input connectors, use the Y, R-Y, B-Y connectors on this VCR.

### Note on EE mode

When the S-video, video, or DV signal is input, this VCR cannot output component signals. You can only output the component signal during normal playback.

### 4 REF. VIDEO INPUT connector (BNC-type)

Input a reference video (black burst) signal.

### 5 CONTROL S jack

When controlling this VCR from an optional remote control unit such as the DSRM-10/20 (not supplied), connect the unit to this jack.

### Note

SIRCS-system has the same function as CONTROL S-system.

### 6 REMOTE connector (D-sub 9-pin)

Connect an editing controller with the RS-422A interface for remote-control of this VCR.

### 7 DV jack

The DV jack is i.LINK compatible. Use when the equipment connected to the VCR has a DV jack. If you connect the VCR and the other equipment using DV jacks, you can minimize deterioration of picture quality during dubbing, or capturing still pictures by digital processing. For details, refer to the instruction manual of the equipment you use.

### Note

i.LINK is a trademark of Sony Corporation and indicates that this product is in agreement with IEEE1394-1995 specifications and their revisions.

### 8 AC IN connector

Connect to an AC power outlet using the supplied power cord.

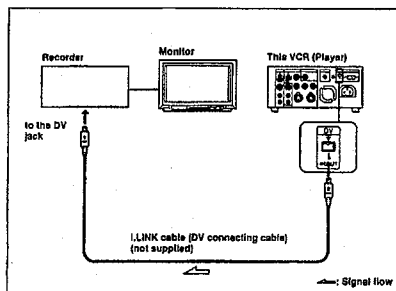
## Playback

This section describes the necessary connections, settings and operations to perform playback on this unit. The same settings and operations apply whether you are using the unit as part of an editing system, for dubbing, or as a stand-alone videocassette player.

## Connections for Playback

### To digital video equipment with the DV jack

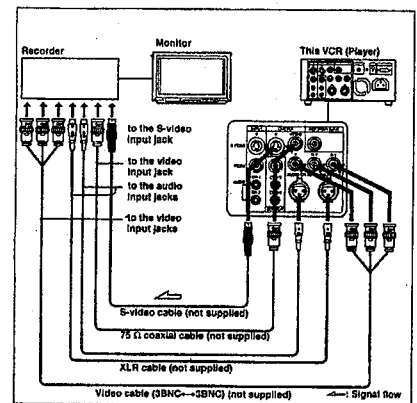
The video and audio signals are sent with hardly any degradation, enabling high-quality recording. The signal flow is automatically detected so you need not make separate connections for input and output.



### Note

- The external lock function of this unit only supports the standard sync signals. With the DV connection, select the DV input with the INPUT SELECT button on this VCR to prevent malfunction resulting from noise, etc.
- Set DV EE OUT in the menu to OFF (see page 52).
- With the DV connection, the sound is recorded in the same audio recording mode as that of the source tape.
- With the DV connection, tape information (recording date, camcorder data, etc.) recorded on the source tape is transmitted from this VCR (player).

### To video equipment without the DV jack



### Notes

- When you connect output jacks of the recorder to input jacks of this VCR, select the input correctly to prevent a humming noise.
- Distorted signals (e.g., when played back at a speed other than normal) will not be recorded properly.
- The indications (Time code, alarm messages, and menu, etc.) displayed on the monitor screen are output only via the MONITOR connector.
- If the DV input is selected, you cannot perform the playback synchronized with the video reference (black burst) signal.

## Settings for Playback

### Preparation on the player (this VCR)

- 1 Power on the video monitor, then set the monitor's input according to the input signals from the recorder.
- 2 Set up the recorder.  
*For details, see "Preparation on the recorder" below.*
- 3 Power on this unit by pressing the ON/STANDBY switch.  
The ON/STANDBY lamp lights in green.
- 4 When you play back a tape recorded in 4-channel mode (Fs 32k), set the AUDIO MONITOR selector to MIX (see page 13). Then select the precise balance between the tracks with the AUDIO MIX BALANCE in the menu (see page 53).

#### Notes

- With the DV connection, the playback VCR's AUDIO MONITOR (sound selection) and AUDIO MIX BALANCE (audio balance adjustment) do not function on the source audio output through the DV jack.
- You cannot change the input signal selection during playback or playback pause mode.

### Preparation on the recorder

- Insert a tape for recording.
- Select the video and audio input signals to be recorded.

#### Note

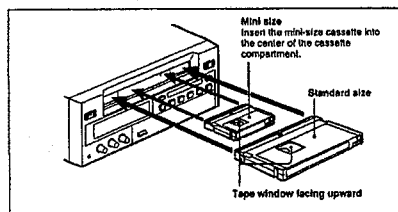
Editing is not possible with a tape that is copyright protected.

## Playback Procedure

#### Notes

- When controlling this unit from an editing controller connected to the REMOTE connector, set the REMOTE/LOCAL switch to REMOTE. When not, set it to LOCAL.
- Do not insert the cassette forcibly. The VCR may be damaged.

- 1 After checking the tape for slack, hold the cassette so that the tape window is facing upward, then insert it into this unit as illustrated below.  
*For details on checking the tape for slack, see page 9.*



The cassette is automatically drawn into the unit.

- 2 Press PLAY.

This starts the playback operation.

## Playback

### Playback Functions

You can enjoy various playback functions using the optional remote control unit.

*For details, refer to the operating instructions supplied with the remote control unit.*

#### Playing at various speeds (JOG)

You can play at various speeds, or frame by frame.

#### Searching (SHUTTLE)

You can easily locate the desired scene, and you can quickly and accurately determine edit points.

#### Searching using the index function (DSRM-20 only)

Three kinds of search are available on this VCR:

- Searching for the beginnings of recordings: Index search
- Searching for a point on the tape where the recorded date changes: Date search
- Searching for scenes recorded in the photo mode with a digital camcorder: Photo search

#### Note

When S-video or video input is selected and no signal is input in search mode, the search screen becomes noisy. In such cases, input the signal or select DV input.

*For a description of search operations via external equipment, see the equipment's operating instructions.*

#### Displaying tape information (DSRM-20 only)

If you record on a tape using a Sony digital camcorder DSR-200/200P/200A/200AP/PD100/PD100P, camcorder data (the shutter speed, program AE mode, white balance, iris and gain) can be recorded on the tape. You can check these data during playback on this VCR.

### Auto Repeat

This VCR can repeat the playback of all, or a part of the tape.

- 1 Set the TIMER switch on the front panel to REPEAT.

The TIMER indicator on the front panel lights.

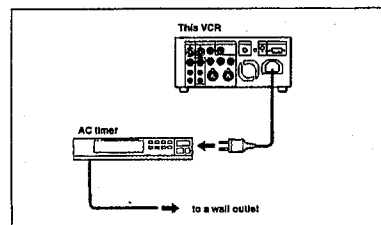
- 2 Press REW to rewind the tape to its beginning.
- 3 Press PLAY.

Playback starts. The VCR repeats the playback from the beginning to the first index (if there is no index on the tape, to the unrecorded portion; if no unrecorded portion, to the tape end).

#### Auto Repeat using an external AC timer

If you connect an external AC timer (not supplied) to this VCR, you can repeat playback automatically at the preset time.

- 1 Connect an external AC timer (not supplied) to this VCR.



- 2 Set the TIMER switch on the front panel to REPEAT.

The TIMER indicator in the display window lights.

- 3 Set the start time using the external AC timer.

At the preset time, the power turns on, and Auto Repeat playback starts automatically within one minute. The VCR repeats the playback from the beginning to the first index (if there is no index on the tape, to the unrecorded portion; if no unrecorded portion, to the tape end).

## Playback

### Notes

- The VCR cannot search for an index or unrecorded portion within 20 seconds from the beginning of the tape.
- While a tape is running, do not turn off the power using an AC timer. The VCR and a tape may be damaged. When turning off the power of the VCR, make sure to press the STOP button on this VCR first to stop the tape transport, then turn off the power.

**To stop Auto Repeat**  
Press the STOP button.

**To release Auto Repeat mode**  
Set the TIMER switch to OFF.

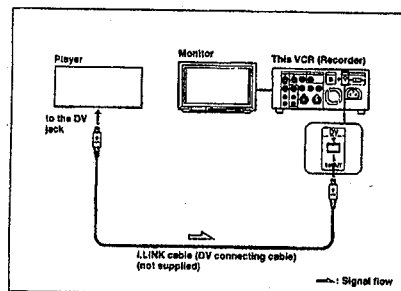
## Recording

This section describes the necessary connections, settings and operations to perform recording on this unit. The same settings and operations apply whether you are using the unit as part of an editing system, for dubbing, or as a stand-alone recorder.

### Connections for Recording

#### To digital video equipment with the DV jack

The video and audio signals are sent with hardly any degradation, enabling high-quality recording. The signal flow is automatically detected so you need not make separate connections for input and output.

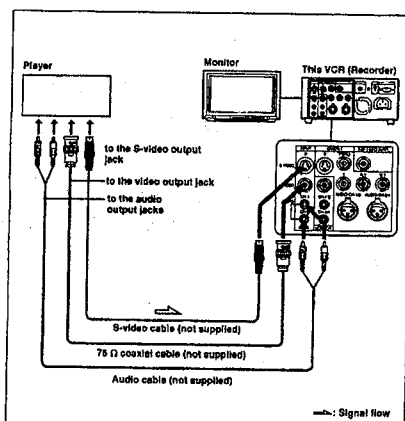


### Notes

- With the DV connection, the sound is recorded in the same audio recording mode as that of the source tape. To record in a different audio recording mode from the source tape, use the INPUT connectors instead.
- With the DV connection, tape information (recording date, camcorder data, etc.) recorded on the source tape is transmitted from the other VCR (player). As a result, when you play back a recorded tape and press the DATA CODE button on the optional DSRM-20 remote control unit, the same tape information recorded on the source tape is displayed on the monitor screen. However, contents of the cassette memory are not transmitted. In addition, the time code is newly recorded on the tape on this VCR, except when copying a tape in Duplication mode.

## Recording

#### To video equipment without the DV jack



### Notes

- When recording the analog input signals, this VCR can digitally output the signals from the DV jack for backup. Set DV EE OUT in the menu to ON (see page 52).
- When you connect output jacks of this VCR to input jacks of the player, select the input correctly to prevent a humming noise.
- Distorted signals (e.g., when played back at a speed other than normal) will not be recorded properly.
- The indications (Time code, alarm messages, and menu, etc.) displayed on the monitor screen are output only via the MONITOR connector.

### Settings for Recording

#### Preparation on the recorder (this VCR)

### Notes

- Before recording, set the clock on the VCR so that the recording time can be written into the index signal. You can set the clock by setting the CLOCK SET menu (see page 53).
- When controlling this unit from an editing controller connected to the REMOTE connector, set the REMOTE/LOCAL switch to REMOTE. When not, set it to LOCAL.
- Editing is not possible with a tape that is copyright protected.

- 1 Power on the video monitor, then set the monitor's input according to the input signals from this unit.
- 2 Set up the player to play back a tape.  
For details, see "Preparation on the player" on the next page.
- 3 Power on this unit by pressing ON/STANDBY switch.

The ON/STANDBY lamp lights in green.

- 4 Use the COUNTER SELECT selector to select the type of time data to be used.

Type of time data	Set the selector to
Time code	TC
Count value of the time counter	COUNTER

- 5 Select the video and audio input signals to be recorded.

Press INPUT SELECT to select the desired signal. Each press of this button cycles through three signal selection options: video, S-video, and DV input. Each selection is shown by a lit indicator in the display window.

### Note

Once you have started recording, you cannot change the input signal selection (except during recording pause mode).

- 6** When using the line connections (INPUT connectors), select the audio mode.

Select the desired mode by setting the AUDIO MODE menu.

Audio mode	Set the menu to
2-channel mode	Fs48k
4-channel mode	Fs32k

On how to use the menu, see Chapter 5 "Menu Settings".

#### Notes

- In the DVCAM format, there are two audio recording modes, with either two channels at 48 kHz or four channels at 32 kHz. It is not possible to select other modes (for example with four channels at 48 kHz).
- When recording in 4-channel mode on this VCR, audio signals are recorded only in channels 1/2.
- Once you have started recording, you cannot change the audio mode selection.

- 7** Use the AUDIO INPUT LEVEL control knobs to adjust audio input levels.

Watching the audio level meter (see page 11), adjust the level so that the meter does not indicate higher values than 0 dB when the audio signal is at its maximum.

When the level exceeds 0 dB, sound distortion occurs.

#### Note

With the DV connection, the recorder VCR's AUDIO MODE (sound selection) and AUDIO INPUT LEVEL (audio balance adjustment) do not function.

### Preparation on the player

- Insert a source tape.
- If the player VCR has an EDIT switch, set it to ON.
- Turn off the on-screen display.

#### Note

With the DV connection, the playback VCR's AUDIO MONITOR (sound selection) and AUDIO MIX BALANCE (audio balance adjustment) do not function on the source audio output through the DV jack.

### Recording Procedure

- 1** After checking that the cassette's safety switch is set to write enabled position and the tape for slack, hold the cassette so that the tape window is facing upward, then insert it into this unit.

For details of the cassette's safety switch, see page 8. For details of checking the tape for slack, see page 9.

The cassette is automatically drawn into the unit and the tape is wound round the head drum. The tape is stationary while the head drum rotates.

- 2** Press the playback button on the player.

This starts the player's playback operation.

- 3** Press and hold REC on this VCR, and press PLAY.

This starts the recorder's recording operation.

#### To stop recording

Press the STOP button.

### Recording

#### Duplication

If you copy a source tape, using the DUP (duplicate) button on this VCR, you can copy the time code recorded on the source tape as they are. You can easily make a work tape having the same time codes as the source tape.

The duplicate function on this VCR works only when using a source tape recorded in DVCAM format and making DV connections.

- 1** Connect this VCR and the other (playback) VCR, using an i.LINK cable (DV connecting cable) (not supplied) and select DV with the INPUT SELECT selector on this VCR.

- 2** Locate the points where you want to start playback and recording.

- 3** Press STOP on this VCR to stop the tape transport operation.

- 4** Press and hold DUP on this VCR, and press PLAY.

The DUP indicator flashes and this VCR enters duplicate-standby mode.

#### Notes

- If the other (playback) VCR has already started playback, the DUP indicator lights and duplication starts immediately.
- If the other (playback) VCR is in the playback pause mode, duplication starts immediately and this VCR continues to record a still picture and a certain time code.

- 5** Press the play button on the other VCR to start playback.

The DUP indicator on this VCR lights and duplicate starts.

#### To adjust the point where duplication starts

In step 4 above, press and hold the DUP button instead of the PLAY button, and press the PAUSE button. This VCR remains recording standby mode until you press the PAUSE button again.

After the other VCR starts playback, press the PAUSE button at the point where you want to start duplication.

#### To stop duplication

Press the STOP button.

#### Notes

- During duplication, do not change the speed of the player's tape or set it to pause mode. Otherwise, the time code of the recorded tape becomes out of sequence and you cannot use it for editing.
- During duplication, time counter does not appear. Check it in the other (player) VCR.
- When you start duplicating, the first part of the source tape may be dropped on the copied tape. Play back the source tape from the preceding point. You cannot completely copy the tape if the source tape is recorded from its beginning point.
- You may not be able to copy the first part or an unrecorded portion of the source tape. Locate the recorded portion on the source tape, then start copying.
- The recording does not stop the moment you press the STOP button to stop editing. The source picture may be recorded a little longer than you expected.
- If you duplicate a tape by using two DSR-40/40Ps, set DV EE OUT in the menu of the player to OFF (see page 52).
- The index signals are not recorded when the duplication starts.
- If you set the REMOTE/LOCAL switch to REMOTE during duplication, the tape stops.

## Notes on Usage in the Editing System

If you use the unit in an editing system, the following functions are limited.

### Notes on general

- Component signals are only output during playback or when selecting DV input. This unit cannot be used as a converter from analog input to component output.
- This unit is not equipped with the synchronization function. Adjust the edit timing with the editing controller, and set sync grade to Preroll & Play.
- Pause mode will be released after the chosen time in the menu to protect the tape except when using the unit in an editing system.
- When AUTO REPEAT is set to ON, and the tape reaches to its end point by fast-forwarding, the jog dial control is not available from external equipment connected to the REMOTE connector.
- You cannot change input signal selection during playback or playback pause mode.
- When S-video or video input is selected and no signal is input in search mode, the search screen becomes unstable.
- When the tape reaches to its beginning or end using the REW or F FWD button, the unit turns to playback pause mode at the point in a few preceding seconds from its beginning or end.

### Notes on connection

- When you use this unit as a recorder of a system with the FXE-120 whose version is 1.0, this unit cannot be used in the drop frame system. If you want to use it in the drop frame system, upgrade the FXE-120 to version 1.01 (Only for DSR-40).
- When inputting a composite or S-video signal, a composite or S-video output signal in EE mode is a through signal of the input.
- When inputting a composite or S-video signal, a component signal in EE mode is not output. Component output is only available during playback or when selecting DV input.
- If the unit turns off when AUTO OFF has been set to OFF, the operations cannot be available with equipment connected to the REMOTE connector. Turn on the power again and perform the operation.
- When inputting a DV signal, and outputting a composite or S-video signal in EE mode, only the color burst signal is exchanged.
- When inputting a DV signal, the unit does not perform a playback synchronized with the external sync signal. This playback is only available when selecting S-video or video input.

### Notes on editing

- With the DV connection, the editing accuracy is less than analog editing accuracy.
- This unit is not equipped with the first edit function.
- Since this unit does not support CTL, the time code of the recorded tape becomes out of sequence and you cannot use it for editing. In such case, adjust the editing IN point.

## Settings on editing control unit

When connecting an editing control unit, make the setting as follows, according to the model.

### FXE-100/120

Set the VCR device constants as follows:

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
80	30	00	95	05	05	0A	8A	0A	08	FE	00	80	5A	FF

### FXE-100P/120P

Set the VCR device constants as follows:

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
81	30	00	7D	05	05	0A	8A	0A	08	FE	00	80	5A	FF

### BVE-600 (NTSC model)

Set the VCR device constants as follows:

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
80	30	00	95	05	05	0A	8A	0A	08	FE	00	80	5A	FF

### BVE-600 (PAL model)

Set the VCR device constants as follows:

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
81	30	00	7D	05	05	0A	8A	0A	08	FE	00	80	5A	FF

### RM-450/450CE

Set the DIP switches as follows:

Left switch

7	6	5	4	3	2	1	0
OFF	-	-	OFF	-	-	-	-

Right switch (RM-450)

7	6	5	4	3	2	1	0
OFF	-	OFF	ON	OFF	OFF	ON	ON

Right switch (RM-450CE)

7	6	5	4	3	2	1	0
ON	-	OFF	ON	OFF	OFF	ON	ON

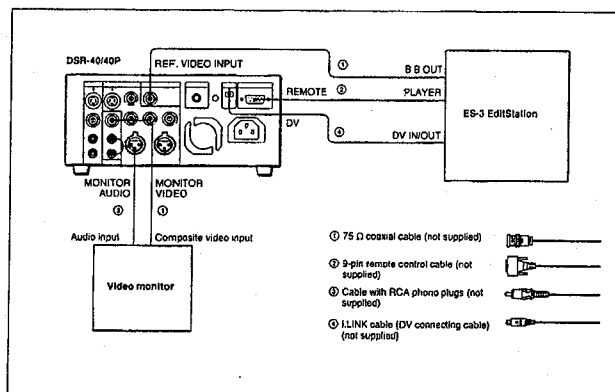
If the edit timing is out of adjustment, change the setting of the numbers 0 to 2 of the right switch.

## Connections for a Digital Non-linear Editing

The unit can be connected to an ES-3 EditStation to configure a digital non-linear editing system. You can transfer video, audio, time code, and other compressed data from this unit to the ES-3. The unit can transfer index pictures recorded on tape and ClipLink log data stored in cassette memory to the ES-3 in an instant.

The following figure shows a connection diagram for non-linear editing system in which this unit serves as the player.

For connections of the ES-3 and its peripheral devices, refer to the ES-3 instruction manual.



### Setting of DSR-40/40P

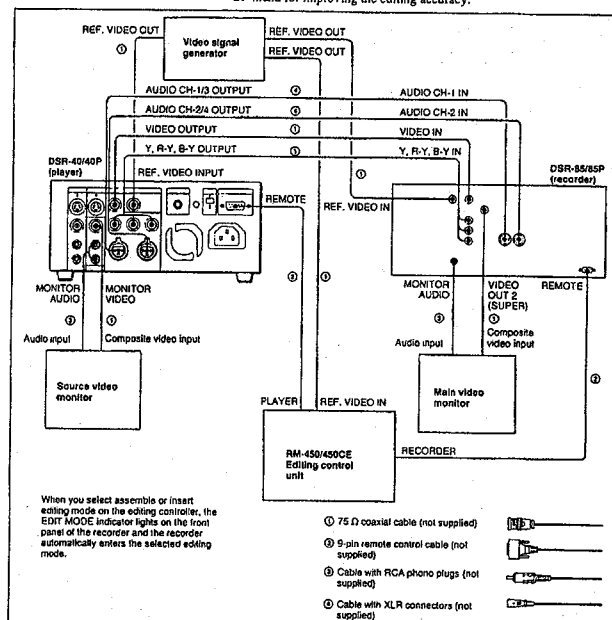
Switch	Setting
REMOTE/LOCAL	REMOTE

## Connections for a Cut Editing System

The following figure shows a cut editing system configuration that uses this unit as the player and a DSR-85/85P as the recorder. For details of connecting devices other than the DSR-40/40Ps, refer to the instruction manual of each device.

### Notes

- When S-video or composite input is selected, S-video or composite output is a through signal.
- The preroll time of the setting on the RM-450/450CE is required for more than five seconds.
- Set RS-422 CUE-UP MODE to WITH VIDEO in the DSR-40/40P's SET UP menu for improving the editing accuracy.



When you select assemble or insert editing mode on the editing controller, the EDIT MODE indicator lights on the front panel of the recorder and the recorder automatically enters the selected editing mode.

## Connections for a Cut Editing System

### Settings on editing controller

For details on the settings of the editing controller, refer to "Adjusting on Edit Timing" on page 40.

Settings on the DSR-40/40P (player) and DSR-85/85P (recorder)

Switch	recorder	player
REMOTE/LOCAL	REMOTE	REMOTE

For details, refer to the instruction manual of DSR-85/85P.

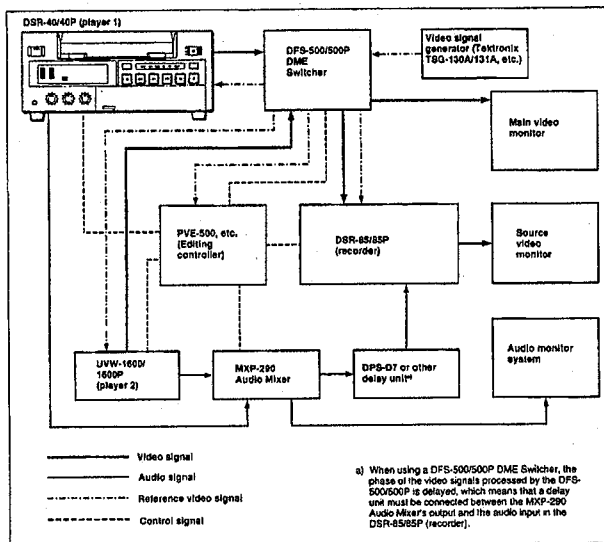
### About reference video signals

In order to provide stable video and audio signals for analog editing, it is necessary for the built-in time base corrector (TBC) to operate correctly. To ensure this, input a reference video signal synchronized with the video signal to the REF. VIDEO INPUT (IN) connector.

## Connections for an A/B Roll Editing System

The following is an example configuration of A/B roll editing system using the DSR-40/40P and DSR-85/85P. In this configuration, the DSR-40/40P is used as player 1, the UVW-1600/1600P (an analog Betacam videocassette player) as player 2, and the DSR-85/85P as recorder. To create a final tape (a tape that contains a completely packaged program) in Betacam format, you can use a Betacam VCR such as the UVW-1800/1800P as the recorder.

The purpose of the following figure is to clearly indicate the flow of signals among the component devices in this system. The specific connections and DSR-85/85P (recorder) settings for this system are described on the following pages.



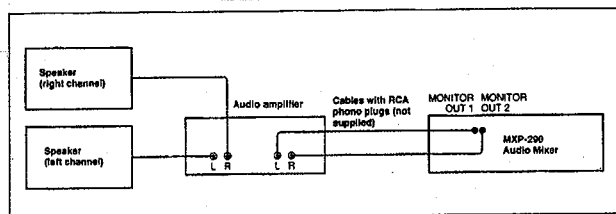
**Note**  
Use the recorder equipped with the synchronization function.

## Connections for an A/B Roll Editing System

### Audio monitor system connections

The following shows an example of audio monitor system connections.

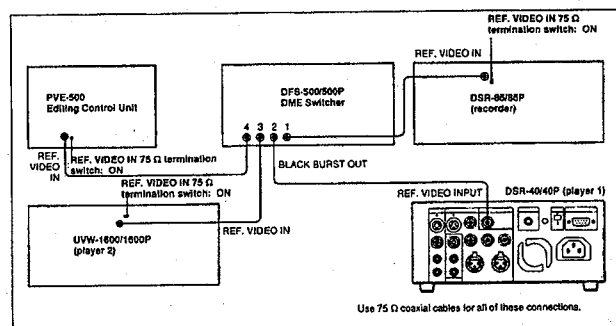
For details of these connections, refer to each connected device's instruction manual.



### Reference video signal connection

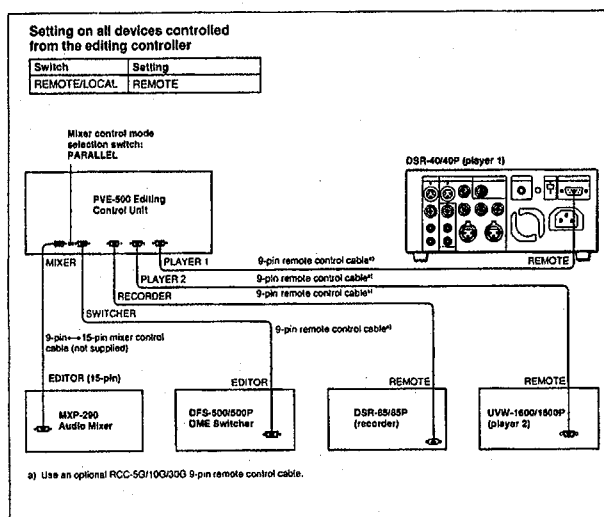
When you perform recording or editing, be sure to use a reference video signal.

For details of the reference video signals, see "About reference video signals" on page 34.



### Control signal connections

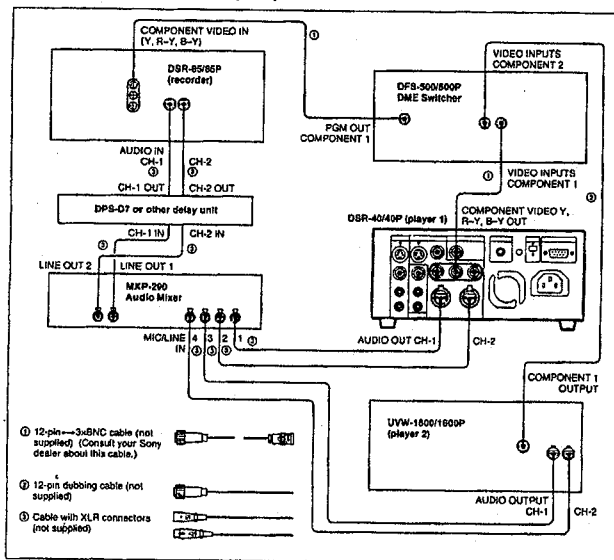
The following shows an example of control signal connections to enable the editing controller to control all other A/B roll editing system devices.



## Connections for an A/B Roll Editing System

### Video/audio signal connections

The following shows an example of video/audio signal connections in an A/B roll editing system. In this example, analog component signals are used as the video signals and XLR 3-pin connectors are used as audio input/output connectors.

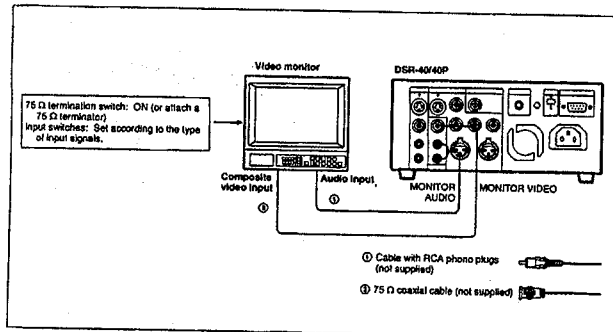


Settings on the DSR-85/85P (recorder)	
Switch	Setting
AUDIO IN 600 $\Omega$ ON/OFF	ON
AUDIO IN -8 dBu/0 dBu/+4 dBu	Normally +4 dBu.

For details of the video/audio input and audio mode settings, refer to the instruction manuals for the devices used.

### Connection of a video monitor

Set up the following connections to enable monitoring of video and audio signals on a video monitor. In addition to video signals, you can have time data, the DSR-40/40P's operation mode, alarm messages, and other information displayed as text on the monitor screen.



**Note**  
When you want to monitor the edited tape, use the monitor output connector on a recording VCR.

## Adjusting an Edit Timing

### Using this unit as a player with the RM-450/450CE

- Set the SYNCHRO selector to ON.
- Set the number 3 of the SYSTEM PRESET right switch to OFF (it is set to OFF at factory).  
Setting this to OFF adjusts the synchronization of the recorder.
- Execute the LEARN function.

### Using this unit as a player 1 with the PVE-500

When using this unit as the player 2, the menu item is indicated in ( ).

- Set Sync Edit of SEUP-10 to OFF in the SETUP menu.
- Set P1 DELAY (P2 DELAY) of SEUP-13 (SEUP-14) to LEARN in the SETUP menu.
- Set REC Sync of SEUP-15 to On in the SETUP menu.
- Set P1 Sync (P2 Sync) of SEUP-16 (SEUP-17) to OFF in the SETUP menu.
- Execute the LEARN function.

### Using this unit as a player 1 with the FXE-120/120P

- When using this unit as the player 2, the menu item is indicated in ( ).
- When using the FXE-100/100P that has been upgraded with the FXE-KIT1, the menu item is indicated in [ ].

- Display the item 104 [301] SYNC GRADE in the SETUP menu, and set PLAYER1 (PLAYER2) to PREROLL & PLAY.
- Display the item 301 (302) [401 as player 1, 402 as player 2] DEVICE TYPE PLAYER1 (DEVICE TYPE PLAYER2) in the SETUP menu, and set the VCR device constants.
- Execute the LEARN function.

If the edit timing is out of adjustment, follow "Adjusting the IN point" on the next page.

### Adjusting the IN point

If the actual edited point does not accurately coincide with the preset editing point, perform the fine adjustment of the edit timing using the SETUP menu of the editing control unit. This improves the editing accuracy.

- Display the item 301 (302) [401 as player 1, 402 as player 2] DEVICE TYPE PLAYER1 (DEVICE TYPE PLAYER2) in the SETUP menu, and set it from DISABLE to ENABLE.
- Repeat editing several times and check the shift of the editing point; that is, count the number of frames to be adjusted.

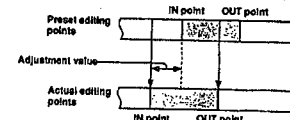
#### Note

The editing result may differ between DISABLE and ENABLE settings of SETUP menu item 301 (302) [401 as player 1, 402 as player 2]. Be sure to check the editing result after changing the setting to ENABLE.

- Set the SETUP menu item 301 (302) [401 as player 1, 402 as player 2] from BYTE 01 to BYTE 10, and calculate the adjustment value.

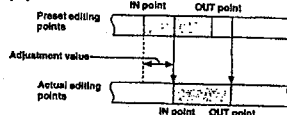
#### How to calculate the adjustment value

If the actual IN point shifts forward to the IN point preset on the player



08 (default setting) + number of frames obtained in step 2  
Example: To adjust 5 frames  
08 + 05 = 0D  
Adjustment value is calculated in hexadecimal.

If the actual IN point shifts backward to the IN point preset on the player



08 (default setting) - number of frames obtained in step 2  
Example: To adjust 5 frames  
08 - 05 = 03

(Continued)

## Adjusting an Edit Timing

- Perform a trial editing and confirm the adjustment result.  
Repeat steps 3 and 4 until best possible result is obtained.

### Using this unit as a recorder with FXE-120/120P

- When using this unit as a recorder, also see chapter 4 "Using the Unit as a Recorder in an Editing System."
- When using FXE-100/100P that has been upgraded with FXE-KIT1, the menu item is indicated in [ ].

- Display the item 102 [112] REMOTE INTERFACE in the SETUP menu, and set RECORDER to OTHERS.
- Display the item 104 [301] SYNC GRADE in the SETUP menu, and set RECORDER to PREROLL & PLAY.
- Display the item 303 [403] DEVICE TYPE RECORDER in the SETUP menu, and set the VCR device constants.
- Execute the LEARN function.

If the edit timing is out of adjustment, follow "Adjusting the IN point" below.

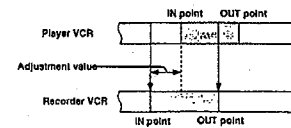
#### Adjusting the IN point

If the actual edited point does not accurately coincide with the preset editing point, perform the fine adjustment of the edit timing using the SETUP menu of the editing control unit. This improves the editing accuracy.

- Display the item 303 [403] DEVICE TYPE RECORDER in the SETUP menu, and set it from DISABLE to ENABLE.
- Repeat editing several times and check the shift of the editing point; that is, count the number of frames to be adjusted.  
**Note**  
The editing result may differ between DISABLE and ENABLE settings of SETUP menu item 303 [403]. Be sure to check the editing result after changing the setting to ENABLE.
- Set the SETUP menu item 303 [403] from BYTE 01 to BYTE 10, and calculate the adjustment value.

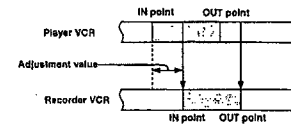
#### How to calculate the adjustment value

If the actual IN point shifts forward to the IN point preset on the player



08 (default setting) - number of frames obtained in step 2  
Example: To adjust 5 frames  
 $08 - 05 = 03$

If the actual IN point shifts backward to the IN point preset on the player



08 (default setting) + number of frames obtained in step 2  
Example: To adjust 5 frames  
 $08 + 05 = 0D$   
Adjustment value is calculated in hexadecimal.

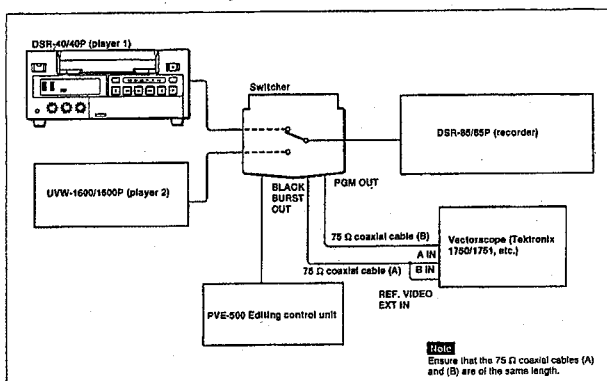
- Perform a trial editing and confirm the adjustment result.  
Repeat steps 3 and 4 until best possible result is obtained.

### Using this unit as a player with the BVE-600

- Set the sync grade (menu 2) to mode number 4, PREROLL & PLAY in auxiliary mode.
- Set the VCR device constants in the setting mode.

## Adjusting the Sync and Subcarrier Phases

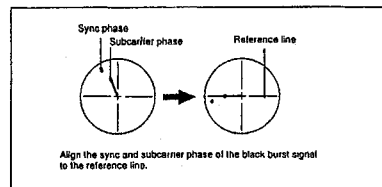
When using two or more players, as in an A/B roll editing system, phase synchronization of the signals (i.e. system sync) is necessary and for composite signals only, the subcarrier phase must also be in sync. If not, picture instabilities or color break-up may occur at edit points. After configuring the editing system, use a vectorscope to adjust the sync and subcarrier phase of the recorder and players. Subcarrier phase adjustment is necessary when using composite signals or Y/C signals.



**Note**  
The sync and subcarrier phase of the output signal from the DFS-500 Switcher are automatically adjusted.

### Performing a phase adjustment operation

- Press the SCH button on the vectorscope.  
The vectorscope switches to "SCH" mode.
- Press the B channel button on the vectorscope.  
This displays the black burst signal from the switcher.
- Press the EXT button on the vectorscope.  
This switches the vectorscope to external synchronization mode.
- Adjust the phase synchronization control on the vectorscope so that the sync and subcarrier phases are close to the reference line.



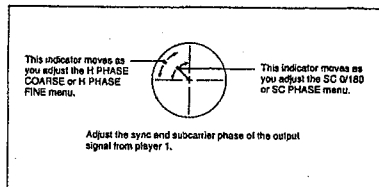
- Output the player 1 signal from the switcher, using the PVE-500.
- Press the A channel button on the vectorscope.  
This displays the sync phase and subcarrier phase (composite signals only) of the signal from player 1.
- On player 1, adjust the SYNC control, using the H PHASE COARSE menu for rough adjustment and the H PHASE FINE menu for fine adjustment, so that the output from player 1 on channel (A) is in correct phase alignment with the black burst signal on channel (B) (See page 33).

(Continued)



## Adjusting the Sync and Subcarrier Phases

- 8 On player 1, adjust the SC control, using the SC 0/180 menu for rough adjustment and the SC PHASE menu for fine adjustment, so that the output from player 1 on channel (A) is in correct phase alignment with the black burst signal on channel (B) (See page 53).



### Note

When component signals are used, the subcarrier phase indicator does not appear.

- 9 Output the player 2 signal from the switcher, using the PVE-500, and repeat steps 7 and 8 to adjust the sync and subcarrier phase of the output from player 2.

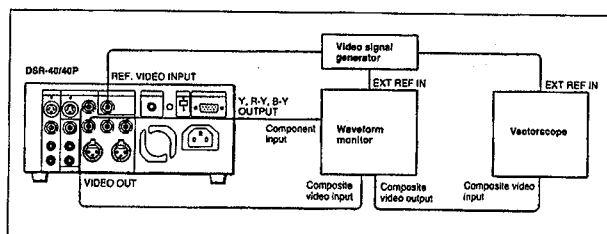
## Adjusting Signals

You can adjust each signal level of the component output signal and the chrominance signal gain level of the composite signal. Connect the reference video (black burst) signal one-to-one with a device that generates the reference video signal, or make a loop-through connection. If the device has a terminal switch, terminate the connection properly.

Both a waveform monitor and a vectorscope are required for adjustments.

### Note

If you adjust component signal level, be sure to adjust chrominance signal gain level of composite signals.



### Adjusting component signal level

- 1 Play back the DSR-40/40P, and output the signals from the Y, R-Y, and B-Y connectors of the OUTPUT connectors.

The picture is displayed on the waveform monitor.

- 2 Adjust Y signal level at the PB COMPONENT Y LEVEL menu (See page 53).  
3 Adjust R-Y signal level at the PB COMPONENT R-Y LEVEL menu (See page 53).  
4 Adjust B-Y signal level at the PB COMPONENT B-Y LEVEL menu (See page 53).

## Adjusting Signals

### Adjusting chrominance signal gain level of the composite signal

- 1 Play back the DSR-40/40P, and output the signals from the VIDEO connector of the OUTPUT connector.

The picture is displayed on the vectorscope.

- 2 Adjust R-Y signal gain level at the COMPOSITE R-Y GAIN menu (See page 53).  
3 Adjust B-Y signal gain level at the COMPOSITE B-Y GAIN menu (See page 53).

## Using the Unit as a Recorder with FXE-100/100P/120/120P

This unit can be used as a recorder with the FXE-100/100P/120/120P. However, editing accuracy will not correspond with the RS-422A standard in the editing system.

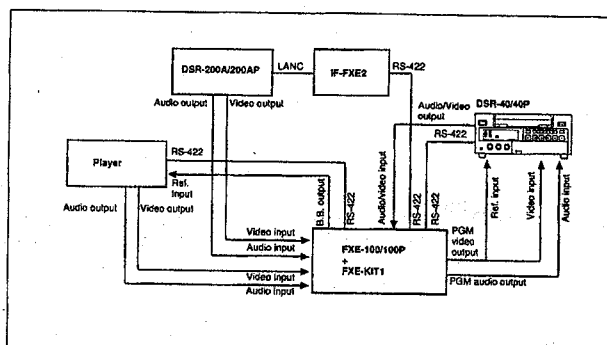
For details on usage and connections, refer to the operating manuals supplied with your devices used in a system.

### Notes

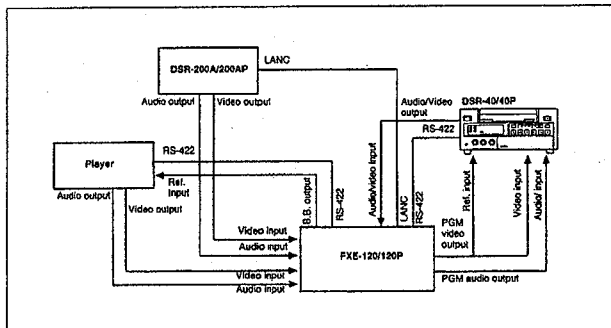
When using this unit as a recorder:

- You cannot execute video/audio insert editing.
- When you use the unit as a recorder with the FXE-120/120P, only assemble editing is available.
- Adjust the edit timing (See page 40).
- Set RECORDER MODE to FXE RECORDER.
- When you use the unit as a recorder with the FXE-100/100P, the FXE-KIT1 is required for upgrading the FXE-100/100P.
- Editing accuracy is not guaranteed. If the duration is very short, the recording may not function properly.
- Be sure to execute the LBARN function. If you do not use the unit for a long time, you have to execute the function also.
- If you execute REC command via RS-422A, it delays the recording start time for about five minutes.
- Set RECORDER to OTHERS in the SETUP menu item 102 (112: when using the FXE-100/100P that has been upgraded with the FXE-KIT1) REMOTE INTERFACE of the FXE-120/120P.

When using this unit as a recorder with the FXE-100/100P (that has been upgraded with the FXE-KIT1)



When using this unit as a recorder with the FXE-120/120P



## Changing Menu Settings

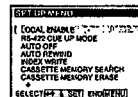
This VCR has various functions available, and you can set and check them on the monitor screen. Before operation, set the clock by setting the **CLOCK SET** menu. You can change the menu settings on the SET UP MENU screen. If necessary, change the settings manually.

### Changing the SET UP MENU Settings

Follow the instructions below to change the settings.

#### 1 Press MENU.

The SET UP MENU appears on the monitor screen.



#### 2 Press $\uparrow/\downarrow$ to select the option you want to change, and press SET.

Each menu option appears on the monitor screen (see the table below).

#### 3 Press $\uparrow/\downarrow$ to change the setting, and press SET.

The menu disappears from the monitor screen. To cancel the menu settings, press MENU again.

### Menu Contents

Initial settings are indicated in bold letters.

Menu options	Set this option to	Description of settings
LOCAL ENABLE	ALL DISABLE	When the REMOTE/LOCAL switch is set to REMOTE, all of the tape transport control buttons (front panel/remote control unit) are disabled.
	STOP & EJECT	When the REMOTE/LOCAL switch is set to REMOTE, only the STOP and EJECT buttons (front panel/remote control unit) are enabled.
	EJECT	When the REMOTE/LOCAL switch is set to REMOTE, only the EJECT button (front panel) is enabled.
RS-422 CUE-UP MODE	WITH VIDEO	While searching with equipment connected to the REMOTE connector, the searching picture is displayed.
	WITHOUT VIDEO	Does not display the searching picture. (The searching speed will be faster than when set to WITH VIDEO.)

## Menu Organization

Menu options	Set this option to	Description of settings
AUTO OFF	ON	To turn off the VCR automatically if there is no operation and the tape stops for an hour (Auto Off).
	OFF	To deactivate Auto Off.
AUTO REWIND	ON	To rewind the tape to its beginning automatically if the tape reaches to an end (Auto Rewind).
	OFF	To deactivate Auto Rewind.
INDEX WRITE	AUTO	To record index signals when recording begins.
	OFF	To deactivate Index Write.
CASSETTE MEMORY SEARCH	AUTO	To search recordings with the cassette memory. If the tape does not have a cassette memory, the VCR will search recordings using index signals recorded on the tape itself.
	OFF	To search recordings using the index signals recorded on the tape.
CASSETTE MEMORY ERASE	ALL DATA	To erase all the data in the cassette memory. (When using the cassette whose memory can store over 16 Kbits of data, you can only select ALL DATA.)
	INDEX DATA	To erase index data in the cassette memory.
	DATE DATA	To erase date data in the cassette memory.
	PHOTO DATA	To erase photo data in the cassette memory.
PHOTO PB	FIELD	To prevent the picture from blurring when playing a tape recorded in photo mode.
	FRAME	To use a clear picture when playing a still picture.
DV EE OUT	ON	To output the selected line input signals from the DV jack.
	OFF	To output only playback video and audio signals from the DV jack.
DISPLAY POSITION	CENTER	To display the tape counter in the center of the monitor screen.
	LOWER RIGHT	To display the tape counter in the lower right of the monitor screen.
	OFF	To not display the tape counter.
CAUTION DISPLAY	ON	To display alarm messages on the monitor screen.
	OFF	To not display alarm messages.
BEEP	ON	To output a beep sound when an illogical operation is made.
	OFF	To deactivate the beep.
TIME CODE (DSR-40 only)	AUTO	To set the time code to the same one as already recorded on the tape.
	NDF	To set the time code to Non Drop Frame.
	DF	To set the time code to Drop Frame.
	Note	If you use AUTO and start recording at the beginning of the tape, the time code is set to Non Drop Frame.
PREROLL TIME SELECT	3SEC	The preroll time can be set between 3 and 10 seconds by four steps.
	5SEC	When an editing controller such as the PVE-500 has been connected, this setting is disabled and the editing controller's setting is in effect.
	7SEC	The preroll time setting is also performed on the editing controller.
	10SEC	
AFTER CUE-UP	STOP	After a cue-up, the unit informs the editing unit that it is in stop mode. (The unit is actually in still mode.)
	STILL	After a cue-up, the unit turns to still mode.
PB STILL DELAY	0FRAME - 10FRAME	Playback still delay can be set between 0 and 9 frames by 11 steps. You can set the delay which the unit turns to playback mode from still mode.
RECORDER MODE	NORMAL PLAYER	To use the unit as a normal player.
	FXE RECORDER	To use the unit as a recorder with the FXE-120/120P in a system.
STILL TIMER	6SEC - 4MIN	You can set the time which releases still or pause mode to protect the tape. Select time from 6 seconds to 4 minutes.

Menu options	Set this option to	Description of settings
NEXT MODE FROM STILL	STEP FWD	To advance the tape one frame after elapsing the set time of STILL TIMER during still mode.
	STB OFF	To turn the unit to standby-off mode from still mode after elapsing the set time of STILL TIMER.
H PHASE COARSE <sup>a)</sup>	—	For rough adjustment of sync phase. <sup>a)</sup>
H PHASE FINE <sup>a)</sup>	—	For fine adjustment of sync phase. <sup>a)</sup>
SC 0/180 <sup>a)</sup>	0DEG - 180DEG	For rough adjustment of subcarrier phase. <sup>a)</sup>
SC PHASE <sup>a)</sup>	—	For fine adjustment of subcarrier phase. <sup>a)</sup>
PB COMPONENT Y LEVEL <sup>a)</sup>	—	Adjusts Y signal level of the component signal in the playback mode. <sup>a)</sup>
PB COMPONENT B-Y LEVEL <sup>a)</sup>	—	Adjusts B-Y signal level of the component signal in the playback mode. <sup>a)</sup>
PB COMPONENT R-Y LEVEL <sup>a)</sup>	—	Adjusts R-Y signal level of the component signal in the playback mode. <sup>a)</sup>
COMPOSITE B-Y GAIN <sup>a)</sup>	—	Adjusts B-Y signal gain level of the composite signal in the playback mode. <sup>a)</sup>
COMPOSITE R-Y GAIN <sup>a)</sup>	—	Adjusts R-Y signal gain level of the composite signal in the playback mode. <sup>a)</sup>
AUDIO MIX BALANCE	—	If you set the AUDIO MONITOR selector to MIX, you can select the precise balance between channels 1/2 and channels 3/4 by five steps.
AUDIO MODE	Fs48k	To set the audio mode to 2-channel mode (16bit mode). This mode uses the whole audio area to record one stereo track. You can get higher sound quality.
	Fs32k	To set the audio mode to 4-channel mode (12bit mode). This mode separates the audio area into 2 parts. You can record two kinds of audio, stereo 1 and stereo 2. When recording on this VCR, audio signals are recorded only in channels 1/2.
JOG WITH SOUND	ON	To listen to the sound when playing a tape at various speeds.
	OFF	To turn off the sound when playing a tape at various speeds.
HOURS METER	—	The digital hours meter keeps cumulative counts of the head drum rotation time and the number of unthreading operations. These counts can be displayed on the monitor screen and are unresettable.
	DRUM ROTATION THREADING	The cumulative total hours of drum rotation with tape threaded is displayed in 10-hour increments. The cumulative number of tape unthreading operation is displayed in 10-operation increments.
CLOCK SET	—	Set the clock on this VCR so that the recording time can be written into the index signal. Using $\uparrow/\downarrow$ and SET buttons, set the date and time.

- a) The ● mark appears on the monitor screen when the value is set to "0."  
b) Adjust the value with the  $\uparrow/\downarrow$  buttons.

## Menu Organization

### Recommended settings in the SET UP menu

Depending on the position of the REMOTE/LOCAL switch, set the menu options as follows:

Menu options	Default	REMOTE	LOCAL
LOCAL ENABLE	ALL DISABLE	Default	Default
RS-422 CUE-UP MODE	WITH VIDEO	Default	Default
AUTO OFF	OFF	OFF	ON
AUTO REWIND	ON	OFF	ON
INDEX WRITE	AUTO	Default	Default
CASSETTE MEMORY SEARCH	AUTO	Default	Default
CASSETTE MEMORY ERASE	ALL DATA	Default	Default
PHOTO PB	FIELD	Default	Default
DV EE OUT	OFF	Default	Default
DISPLAY POSITION	LOWER RIGHT	Default	Default
CAUTION DISPLAY	ON	Default	Default
BEEP	ON	Default	Default
TIME CODE (Only for DSR-40)	AUTO	Default	Default
PREROLL TIME SELECT	7 SEC	Default	Default
AFTER CUE-UP	STOP	Depending on editing unit	Default
PB STILL DELAY	0 FRAME	Default	Default
RECORDER MODE	NORMAL PLAYER	Depending on editing unit	Default
STILL TIMER	8 SEC	Default	Default
NEXT MODE FROM STILL	STB OFF	Default	Default
H PHASE COARSE	-	Depending on editing system	Default
H PHASE FINE	-	Depending on editing system	Default
SC 0/180	0 DEG	Depending on editing system	Default
SC PHASE	-	Depending on editing system	Default
PB COMPONENT Y LEVEL	-	Depending on editing system	Default
PB COMPONENT B-Y LEVEL	-	Depending on editing system	Default
PB COMPONENT R-Y LEVEL	-	Depending on editing system	Default
COMPOSITE B-Y GAIN	-	Depending on editing system	Default
COMPOSITE R-Y GAIN	-	Depending on editing system	Default
AUDIO MIX BALANCE	-	Default	Default
AUDIO MODE	Fs48k	Default	Default
JOG WITH SOUND	ON	ON	OFF

- Default: Set the menu option to be suitable for your usage; you can use with the default setting.
- Depending on editing unit: Set the menu option to be suitable for your unit.
- Depending on editing system: Set the menu option to be suitable for your system.

## Alarm Messages

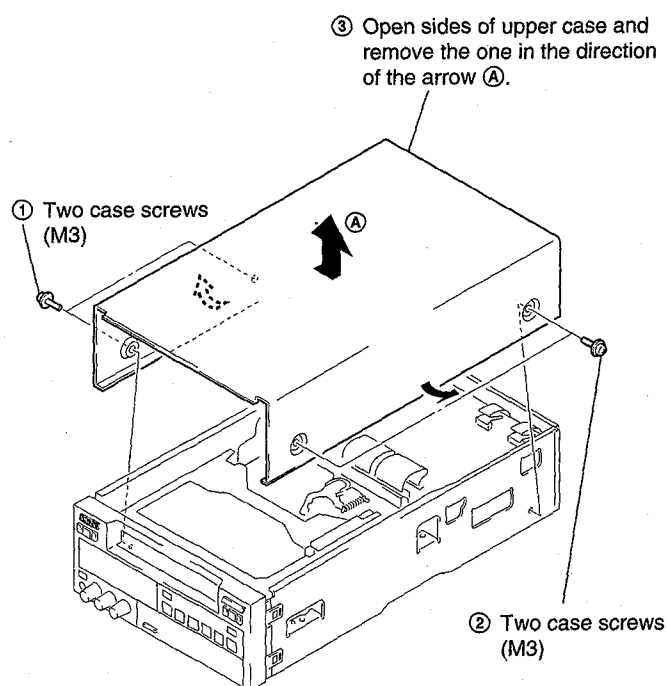
Various messages appear on the monitor screen ("Err" appears in the display window). Check them with the following list.

Message	Meaning / Remedy
PLEASE CONFIRM THE SAFETY SWITCH OF THE CASSETTE	Check that the protect tab is slid in so that the red portion visible. → Slide back the safety switch (see page 6).
NO CASSETTE MEMORY	You try to erase cassette memory when there is no cassette memory.
VCR IS RECORDING	You press a certain operation button during recording or editing.
PLEASE INSERT A NEW CASSETTE	Though no cassette is inserted in the cassette compartment, you press PLAY, etc. → Insert a cassette.
THE TAPE IS REWOUND	You press REW at the beginning of the tape.
PLEASE REWIND OR INSERT A NEW CASSETTE	You try to start playback or recording at the tape end. → Rewind the tape or insert a new cassette.
PLEASE SET THE CLOCK	When turning on the power, the clock has not been set. → Set the clock in the menu (see page 53).
THIS PROGRAM IS COPYRIGHT PROTECTED	You try to dub the tape on which copyright protect signals are recorded.
CASSETTE MEMORY IS TOO LARGE TO ERASE	You try to erase data on a tape having more than 18 Kbits memory capacity in INDEX DATA, DATE DATA, or PHOTO DATA mode. → Erase it in ALL DATA mode (see page 52).
WRITING ON CASSETTE MEMORY. PLEASE WAIT	You do certain operation while the VCR is writing on cassette memory. → Operate after writing on cassette memory is complete.
VCR IS IN DUP MODE	You press a certain operation button during duplication.

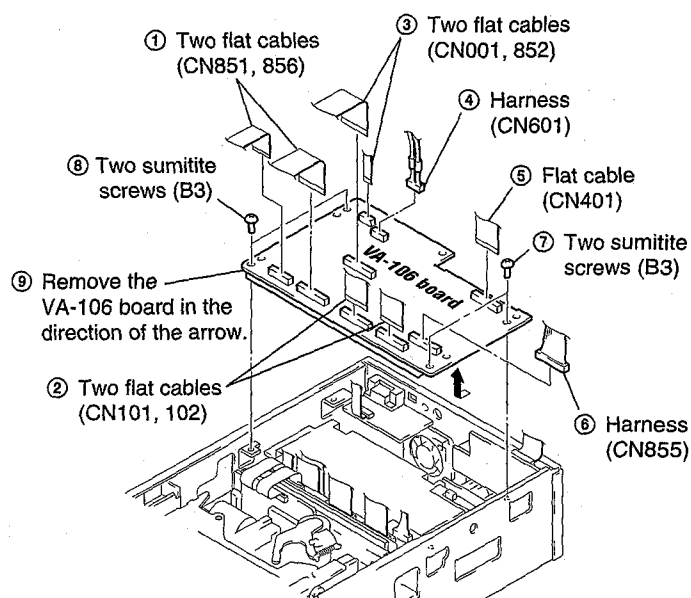
## SECTION 2 DISASSEMBLY

**Note:** Follow the disassembly procedure in the numerical order given.

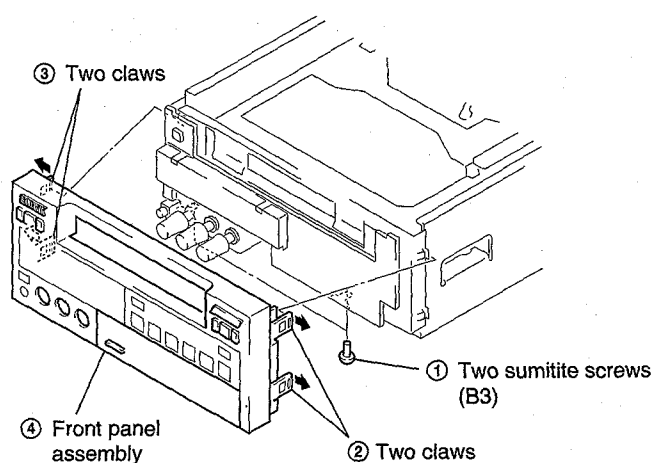
### 2-1. REMOVAL OF UPPER CASE



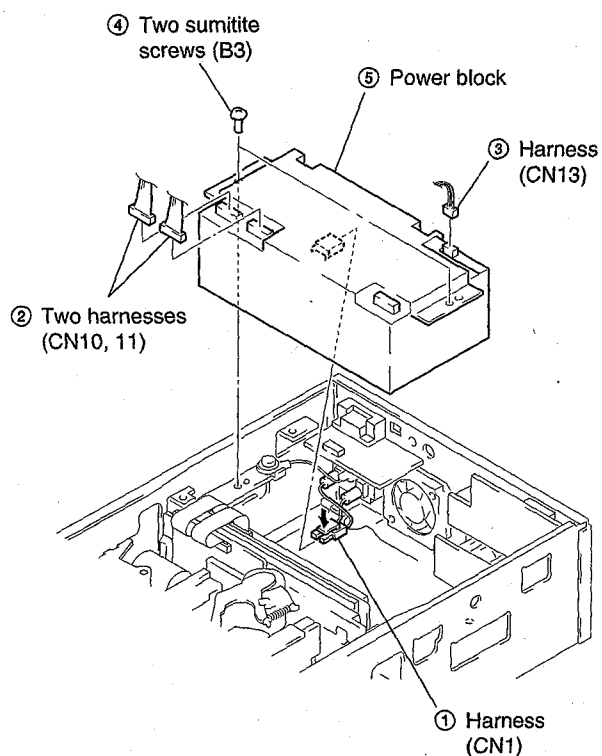
### 2-3. REMOVAL OF VA-106 BOARD



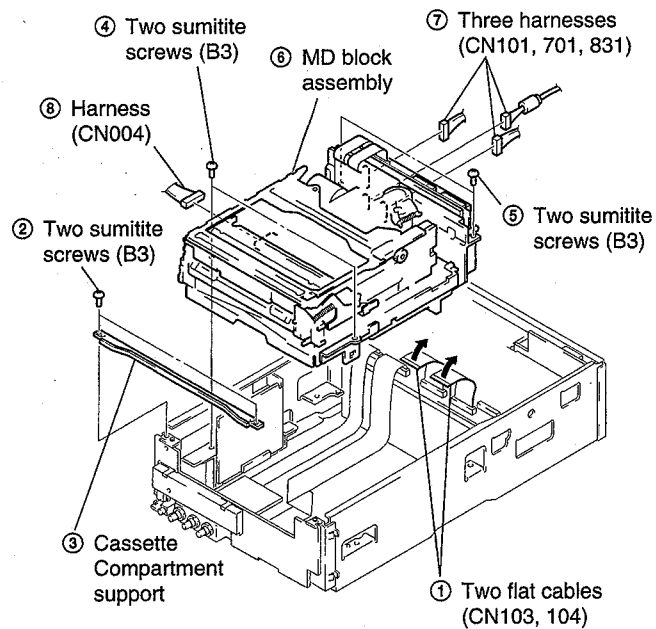
### 2-2. REMOVAL OF FRONT PANEL ASSEMBLY



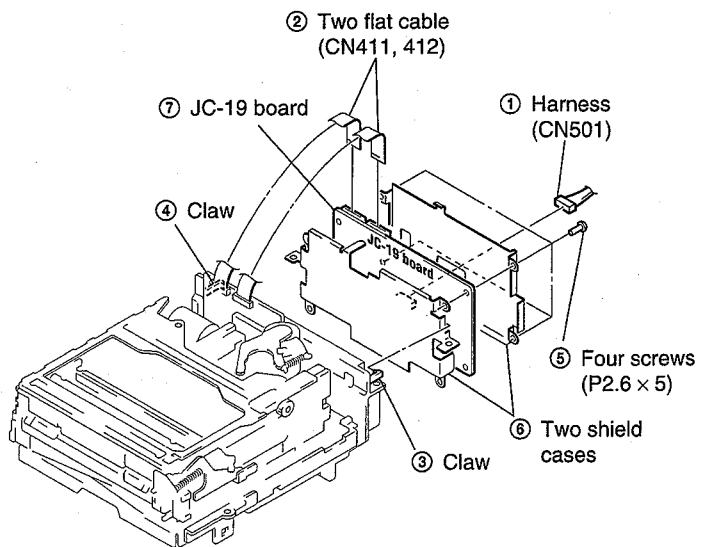
### 2-4. REMOVAL OF POWER BLOCK



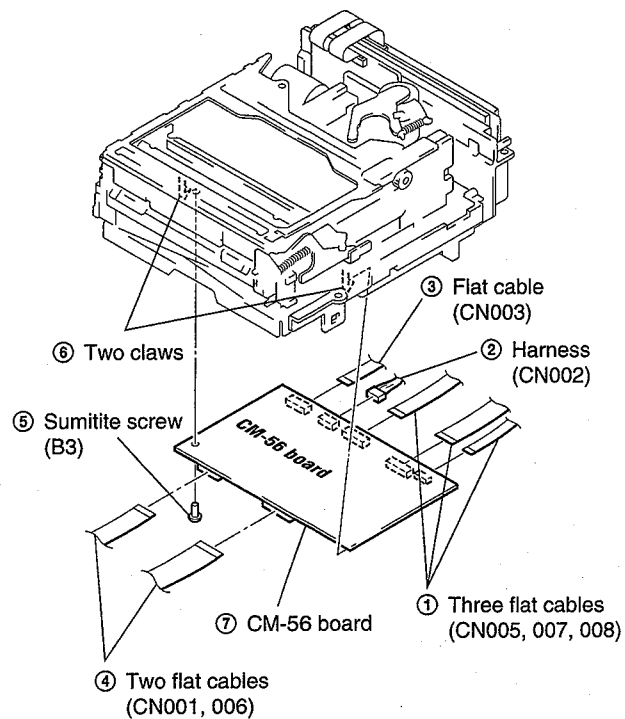
## 2-5. REMOVAL OF MD BLOCK ASSEMBLY



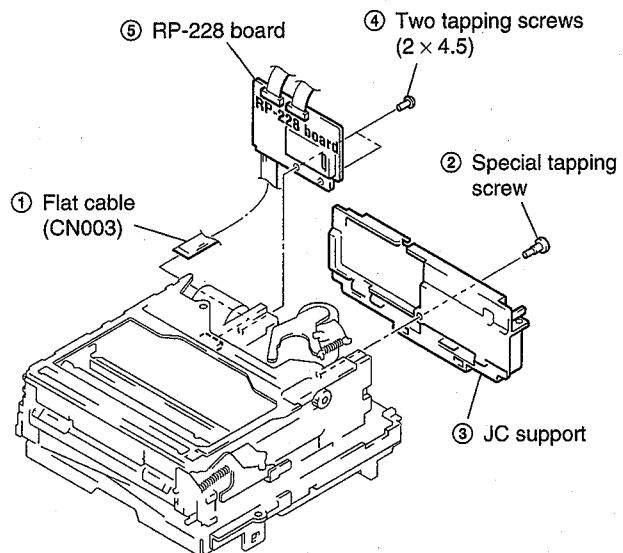
## 2-7. REMOVAL OF JC-19 BOARD



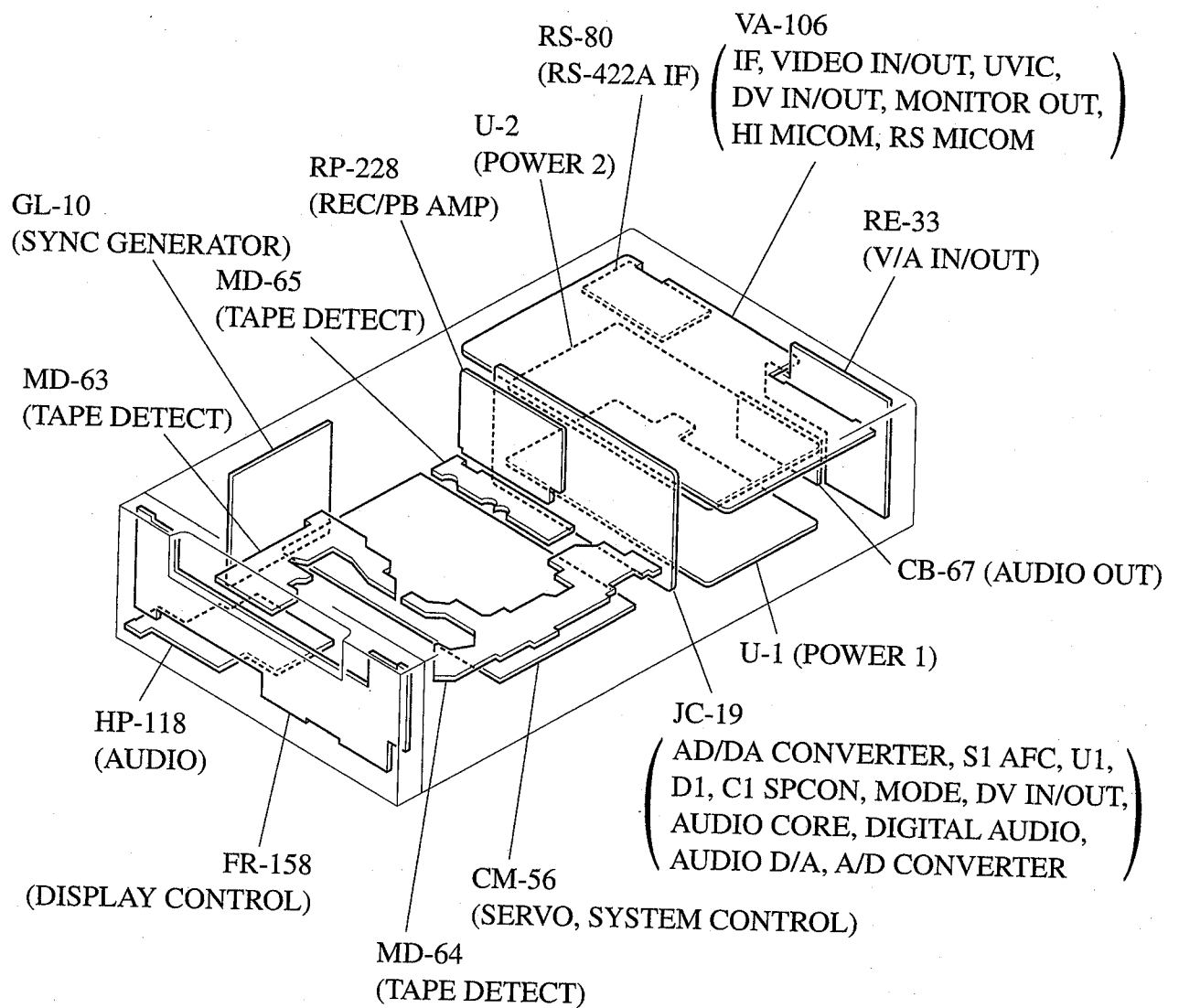
## 2-6. REMOVAL OF CM-56 BOARD



## 2-8. REMOVAL OF RP-228 BOARD



## 2-9. CIRCUIT BOARDS LOCATION

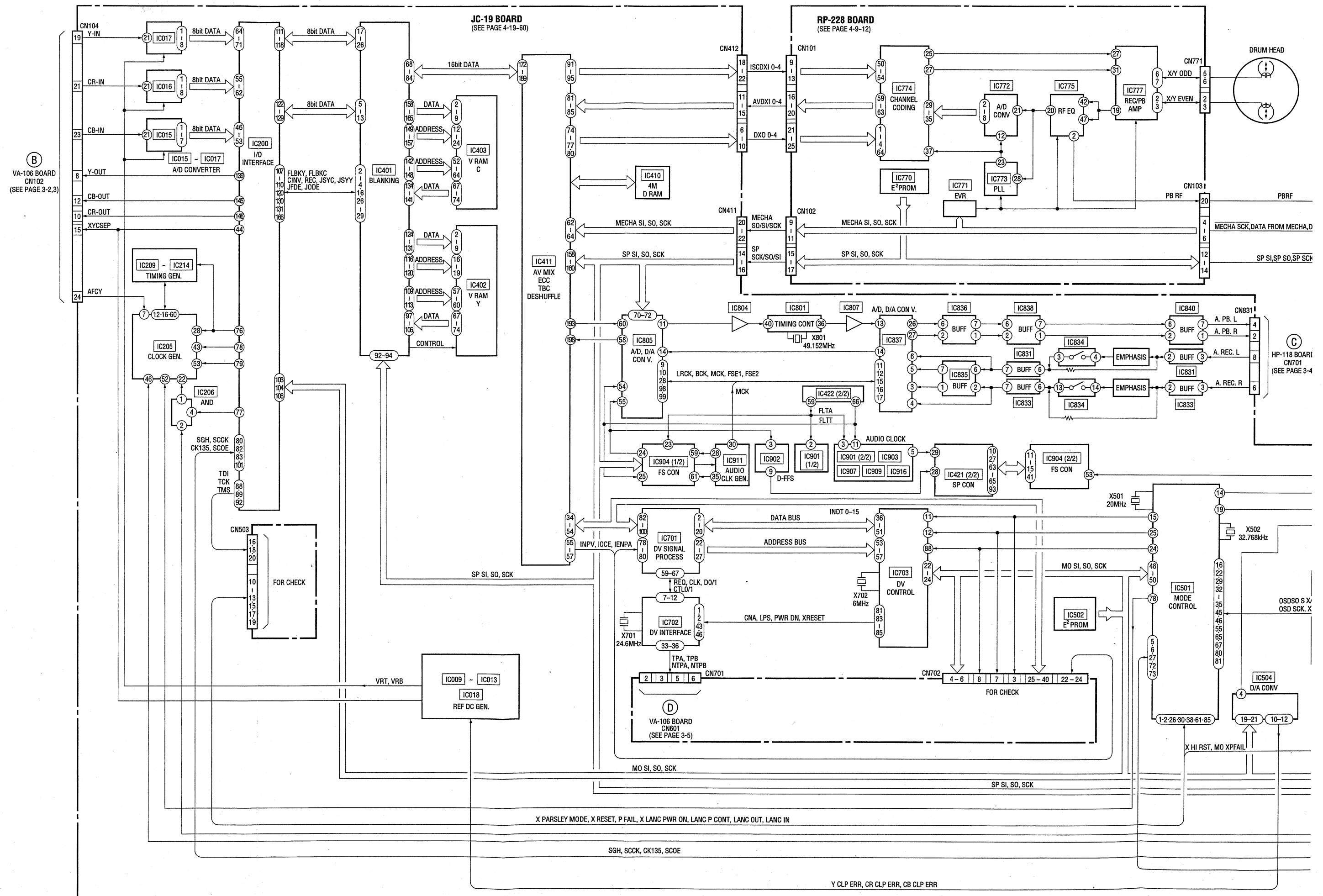






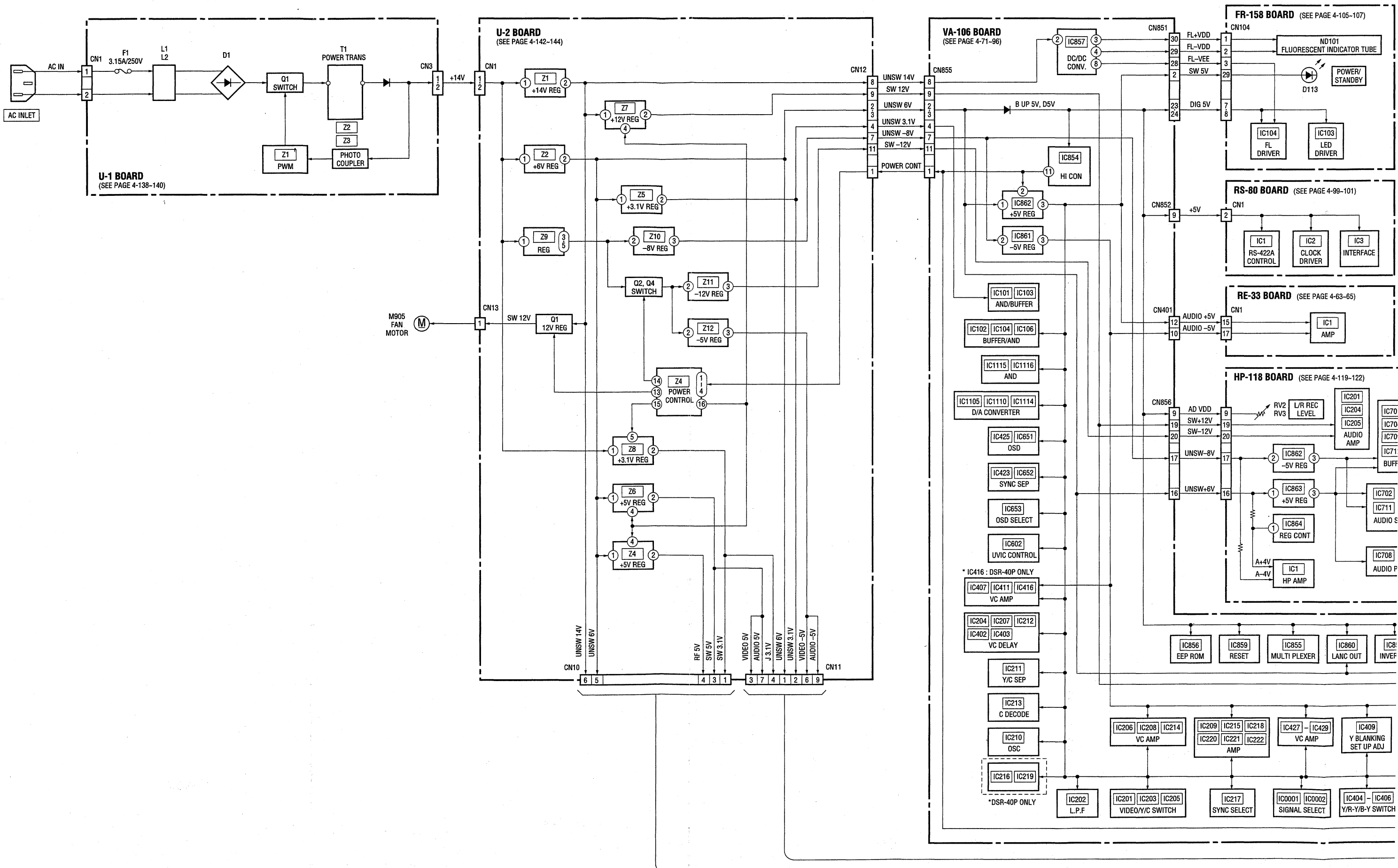


### 3-2. OVERALL BLOCK DIAGRAM 2



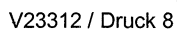


3-3. OVERALL BLOCK DIAGRAM 3



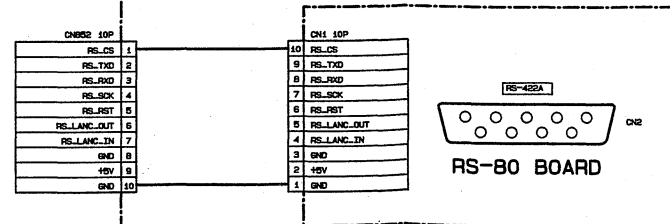
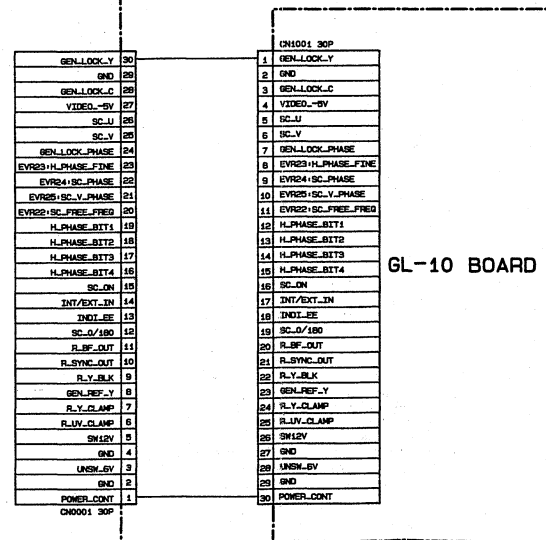
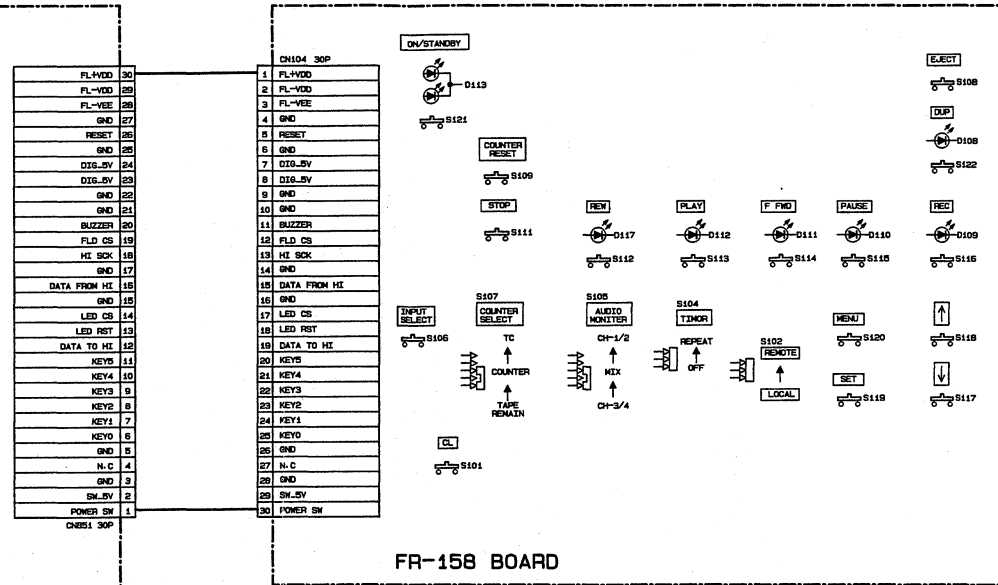
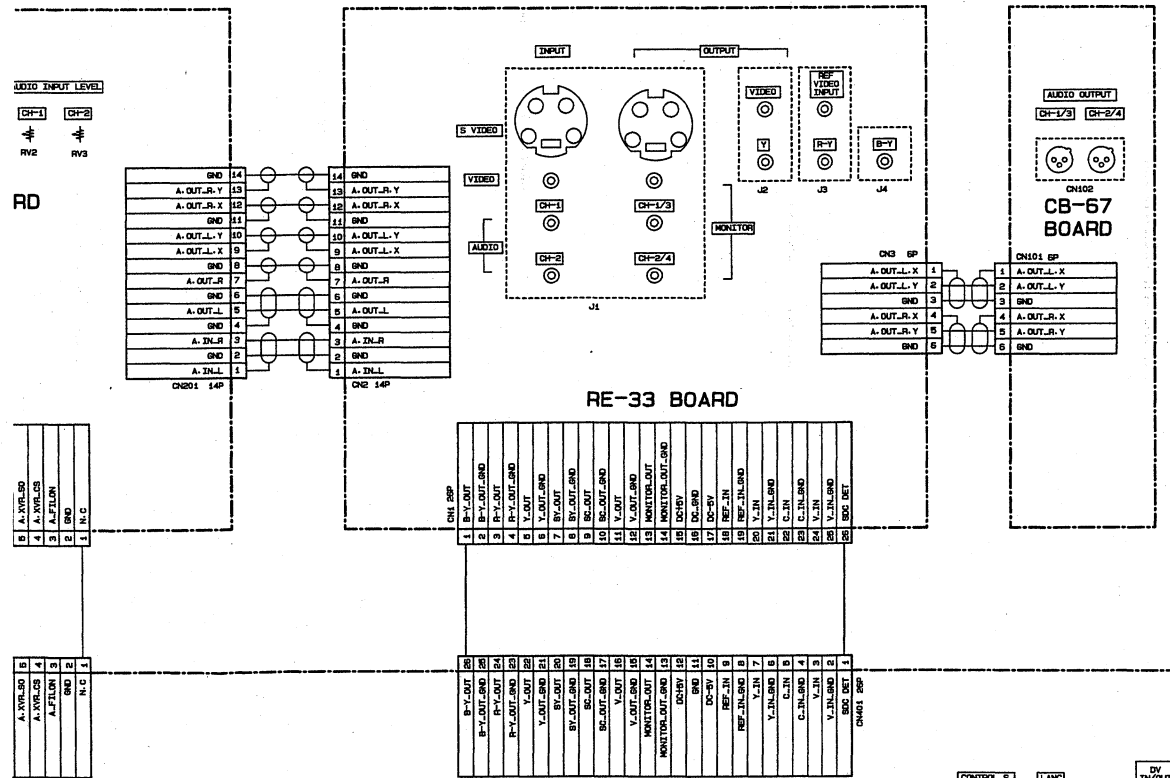
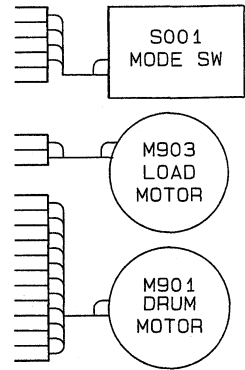


#### 4-1. FRAME SCHEMATIC DIAGRAM



22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40

A  
B  
C  
D  
E  
F  
G  
H  
I  
J  
K  
L  
M  
N  
O  
P

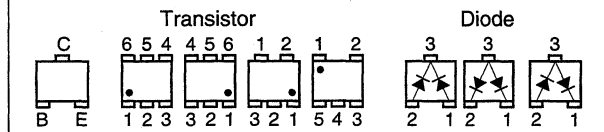




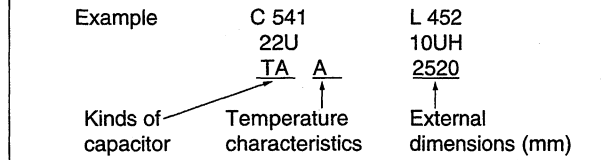
4-2. PRINTED WIRING BOARDS AND SCHEMATIC DIAGRAMS

THIS NOTE IS COMMON FOR PRINTED WIRING BOARDS AND SCHEMATIC DIAGRAMS.  
(In addition to this, the necessary note is printed in each block)

- For printed wiring boards:**
- Pattern from the side which enables seeing. (The other layers' pattern are not indicated)
  - Circled numbers refer to waveforms.
  - Through hole is omitted.
  - There are few cases that the part printed on diagram isn't mounted in this model.
  - Chip parts.



- For schematic Diagram:**
- All capacitors are in  $\mu\text{F}$  unless otherwise noted.  $\text{pF}$ :  $\mu\text{pF}$  50V or less are not indicated except for electrolytics and tantalums.
  - Chip resistors are  $\frac{1}{10} \text{ W}$  unless otherwise noted.  $\text{k}\Omega$ : 1000 $\Omega$ ,  $\text{M}\Omega$ : 1000 $\text{k}\Omega$ .
  - Caution when replacing chip parts. New parts must be attached after removal of chip. Be careful not to heat the minus side of tantalum capacitor, because it is damaged by the heat.
  - Some chip part will be indicated as follows.



- Constants of resistors, capacitors, ICs and etc with XX indicate that they are not used. In such cases, the unused circuits may be indicated.
- Parts with  $\star$  differ according to the model/destination. Refer to the mount table for each function.
- All variable and adjustable resistors have characteristic curve B, unless otherwise noted.
- Signal name  
XEDIT  $\rightarrow$  EDIT PB/XREC  $\rightarrow$  PB/REC
- $\square$ : nonflammable resistor.
- $\square$ : fusible resistor.
- $\square$ : panel designation.
- $\square$ : B+ Line.\*
- $\square$ : B- Line.\*
- $\square$ : IN/OUT direction of B line (+, -).\*
- $\square$ : adjustment for repair.\*
- Circled numbers refer to waveforms.\*

- Measuring conditions voltage and waveform:**
- Voltages and waveforms are measured between the measurement points and ground when color bar signal input. They are reference values and reference waveforms.\* (VOM of DC 10  $\text{M}\Omega$  input impedance is used)
  - Voltage values change depending upon input impedance of VOM used.
  - \* Indicated by the color red.

**Note:**  
The components identified by mark  $\Delta$  or dotted line with mark  $\Delta$  are critical for safety. Replace only with part number specified.

**Note:**  
Les composants identifiés par une marque  $\Delta$  sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

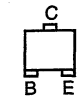
When indicating parts by reference number, please include the board name.

RP-228 BOARD (SIDE A)

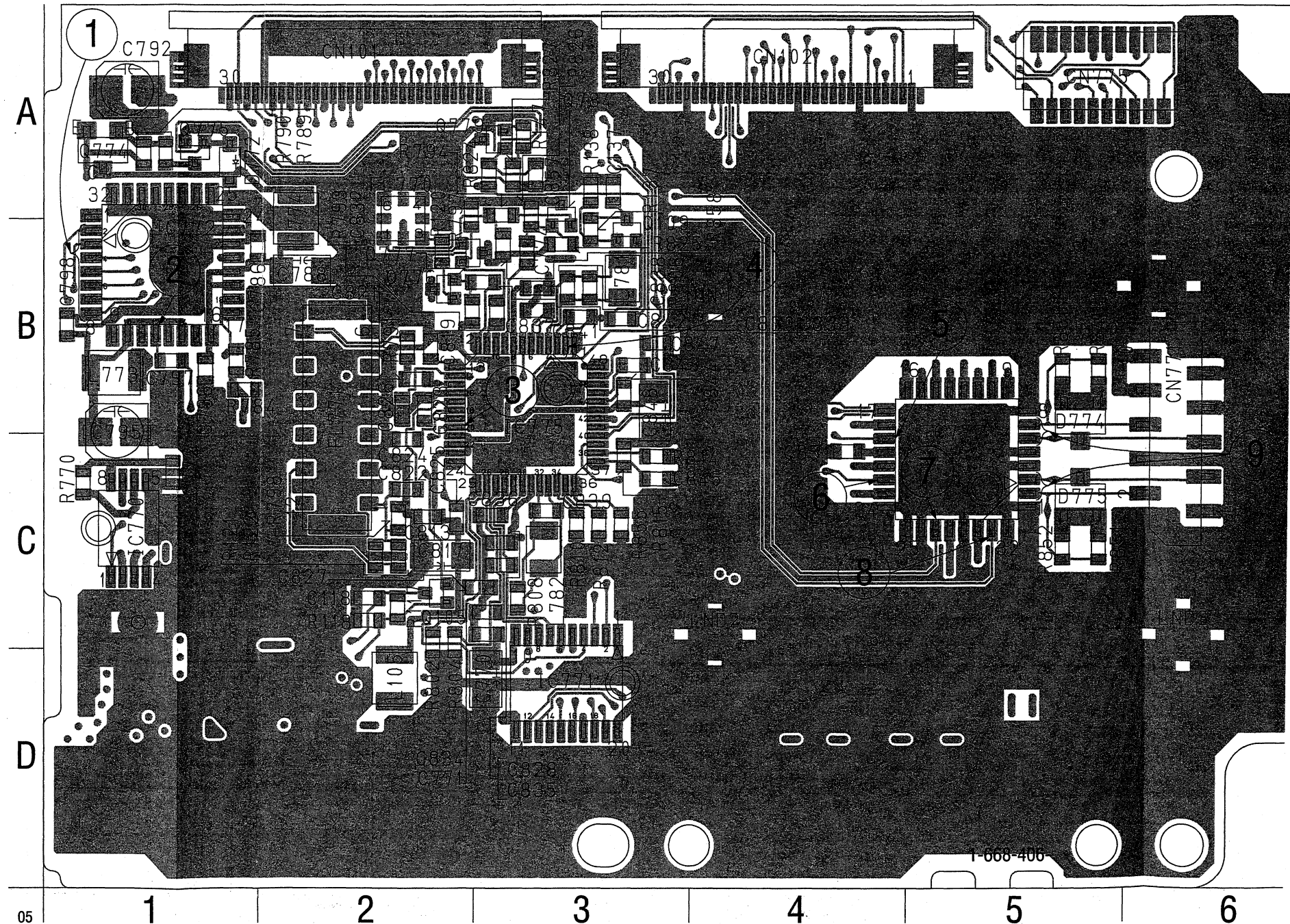
CN101	A-2
CN102	A-4
CN771	B-6
CN775	A-5
D772	A-1
D774	B-5
D775	C-5
IC770	C-1
IC771	D-3
IC772	B-1
IC775	B-3
IC777	C-5
Q105	C-2
Q109	B-3
Q774	A-1
Q775	A-1
Q776	B-2
Q777	B-2
Q779	A-3
Q784	B-3

RP-228 (REC/PB AMP) PRINTED WIRING BOARD  
- Ref. No.: RP-228 board; 7,000 series -

- For Printed Wirin
- RP-228 board is s of layers 2 to 5 ha
- There are few cas is printed on this c
- Chip transistor

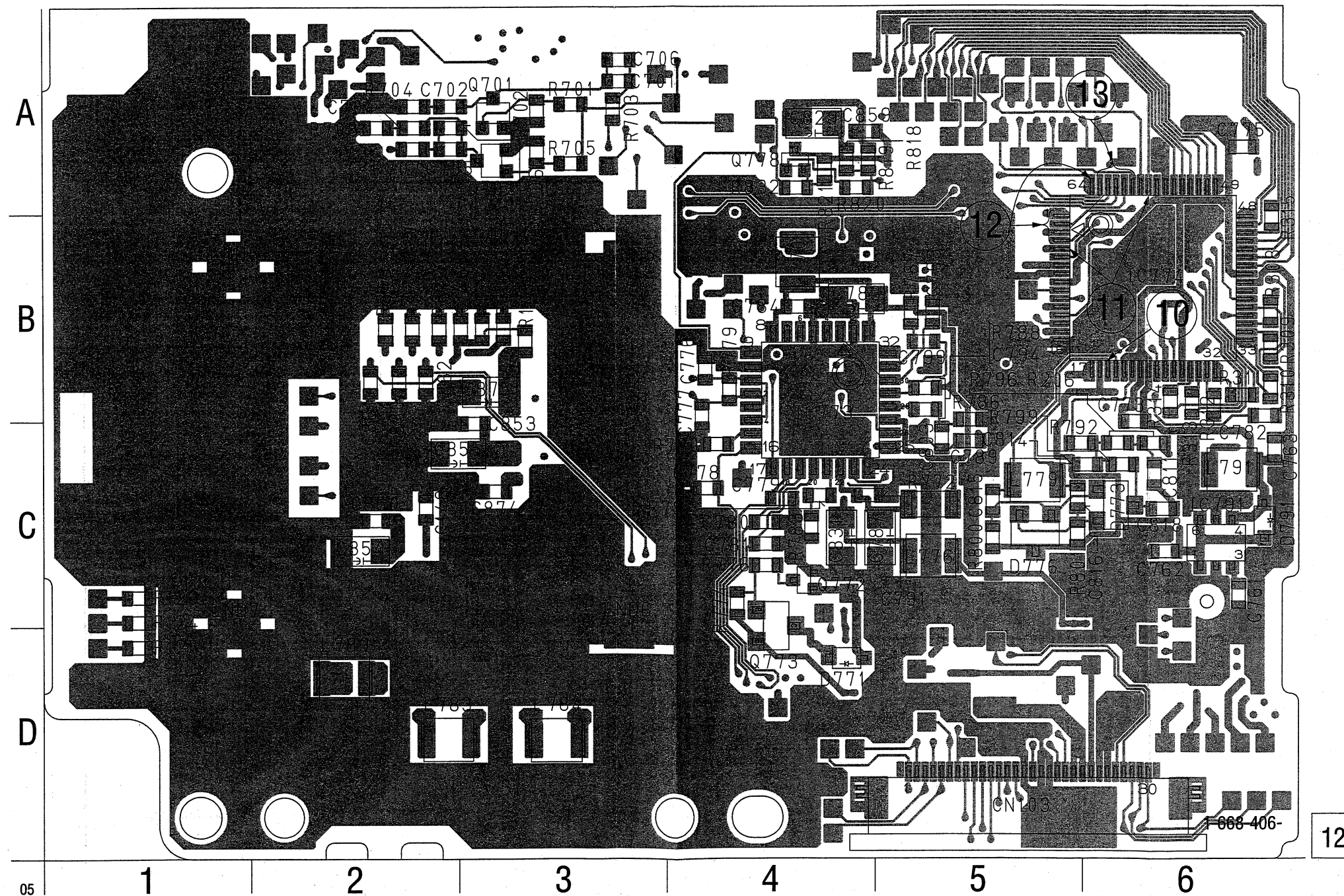
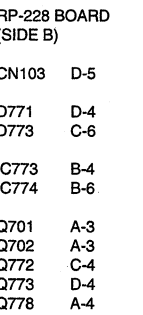


RP-228 BOARD (SIDE A)



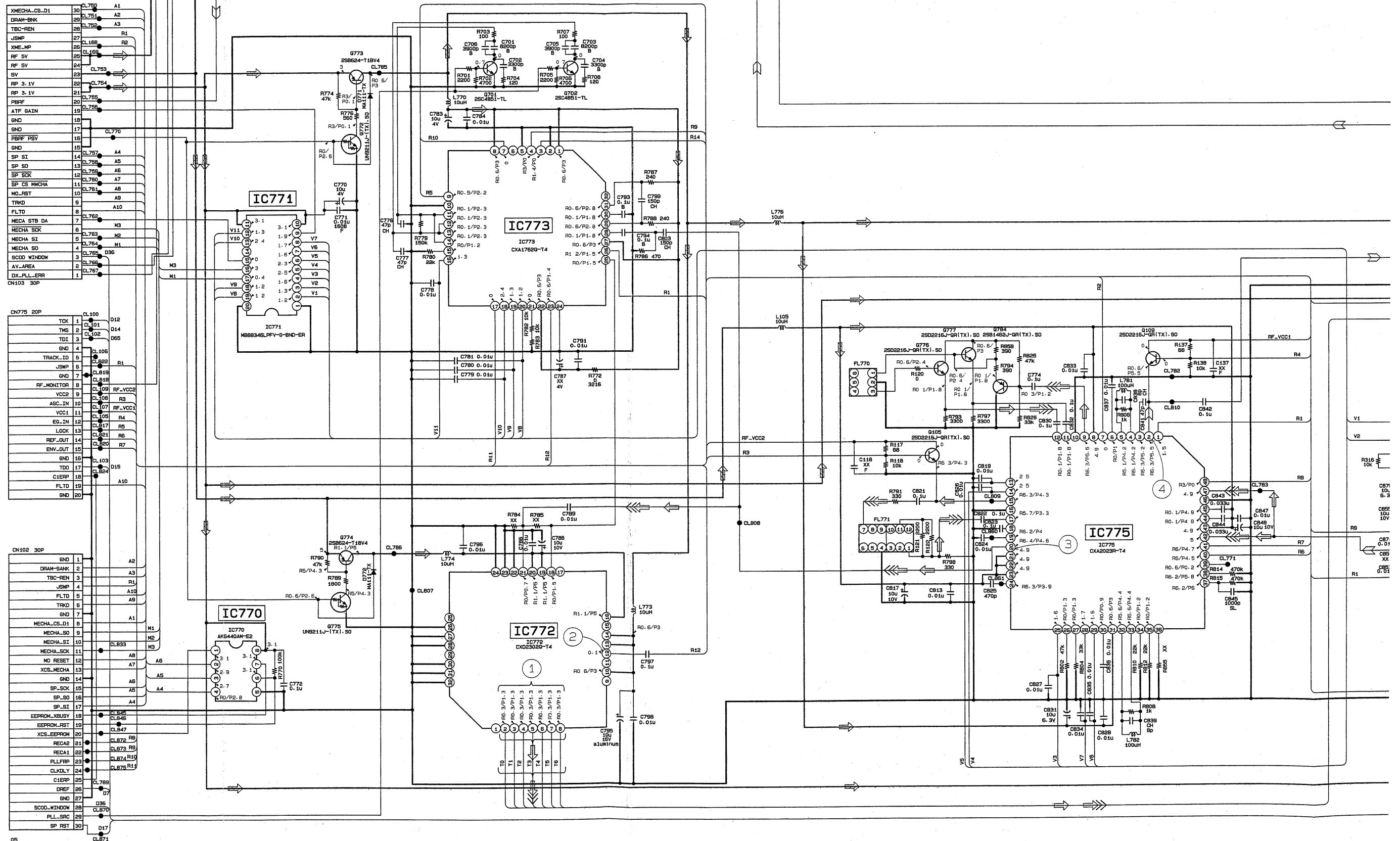


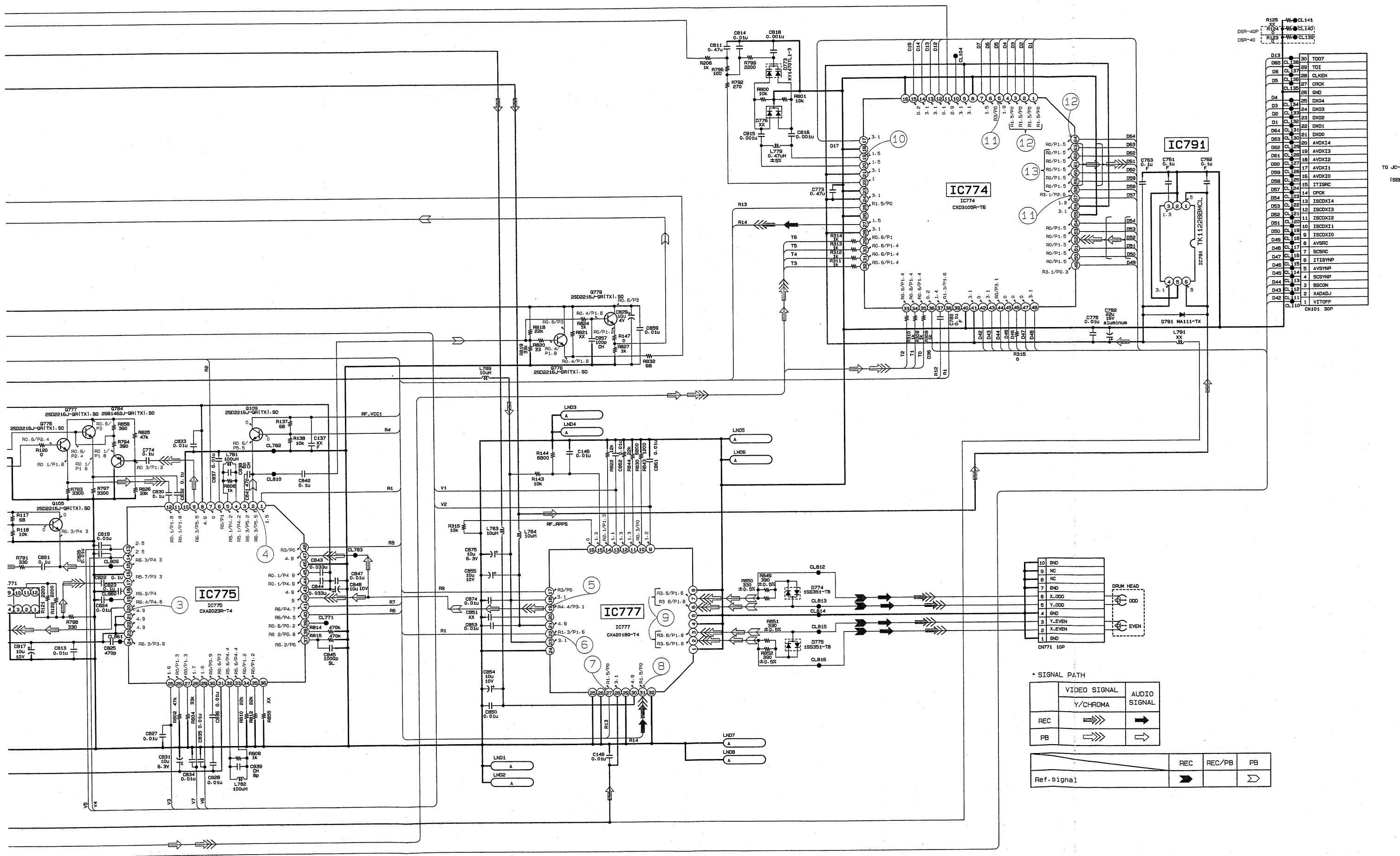
- 

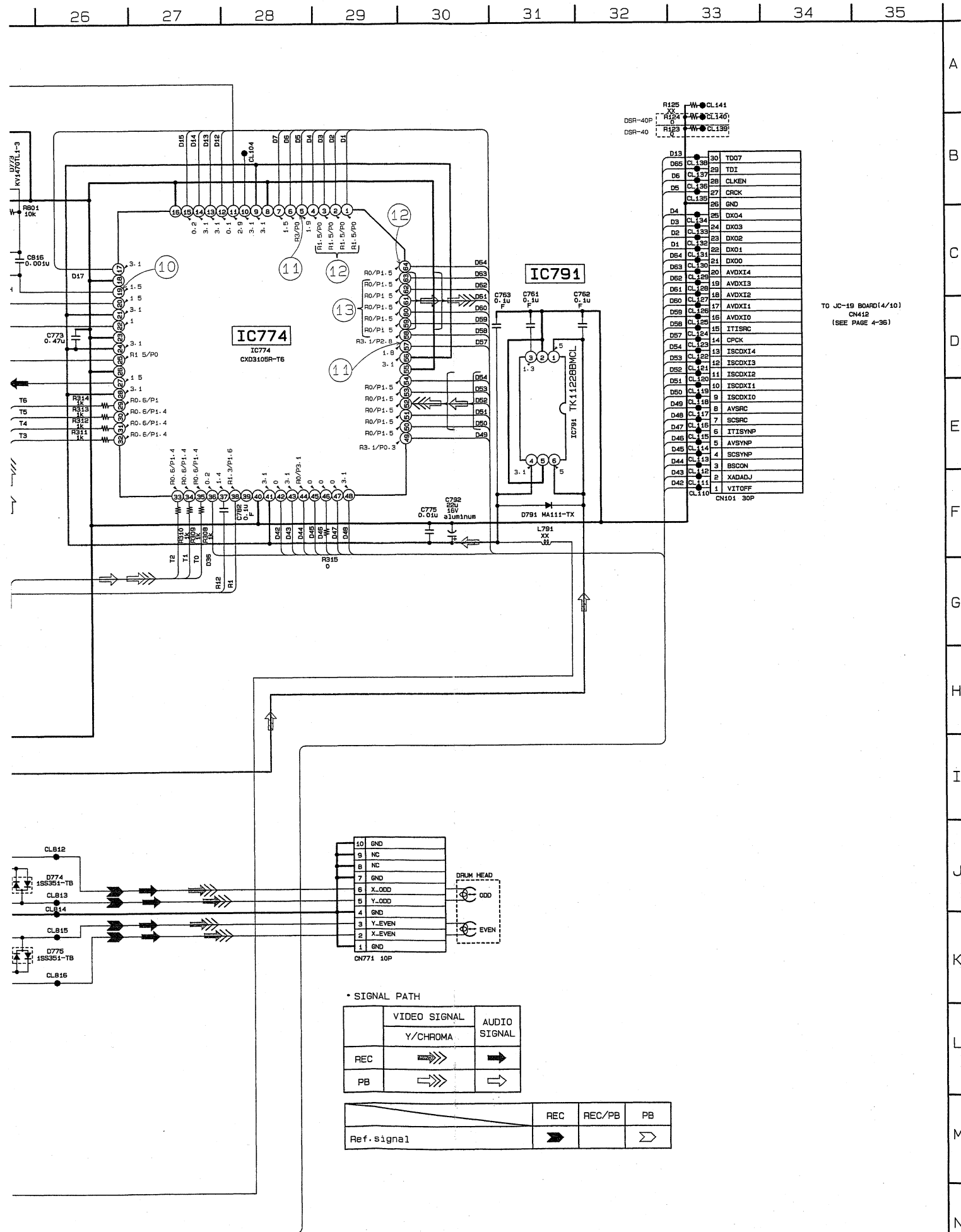




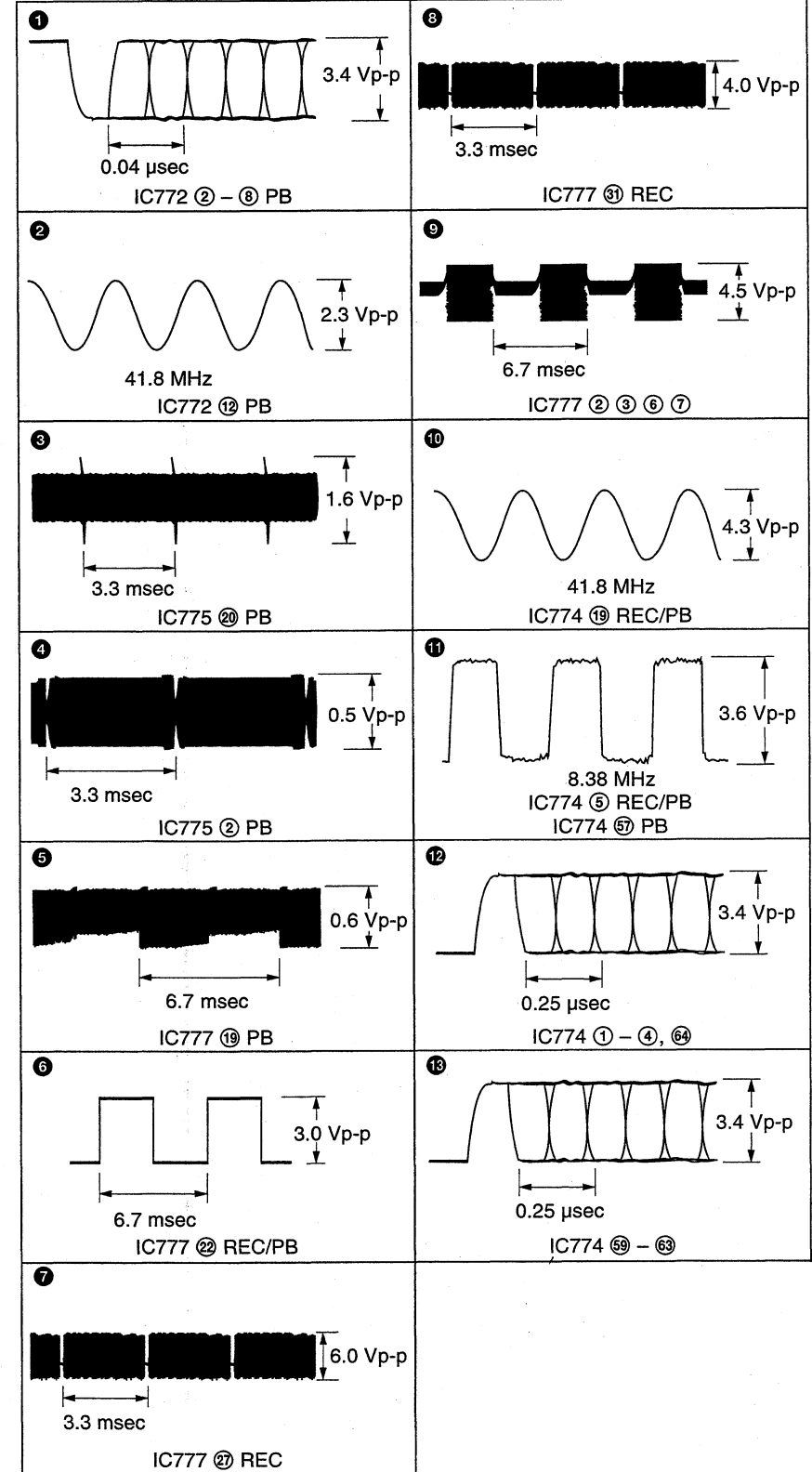
```
REC/PB AMP
-REF.NO.:7.000 SERIES-
XX MARK:NO MOUNT
NO MARK:REC/PB MODE
P:REC MODE
P:PB MODE
```







RP-228 BOARD





JC-19 (AD/DA CONVERTER, S1 AFC, U1, D1, C1 SPCON, MODE, DV IN/OUT, AUDIO CORE, DIGITAL AUDIO, AUDIO D/A, A/D CONVERTER) PRINTED WIRING BOARD

– Ref. No.: JC-19 board; 5,000 series –

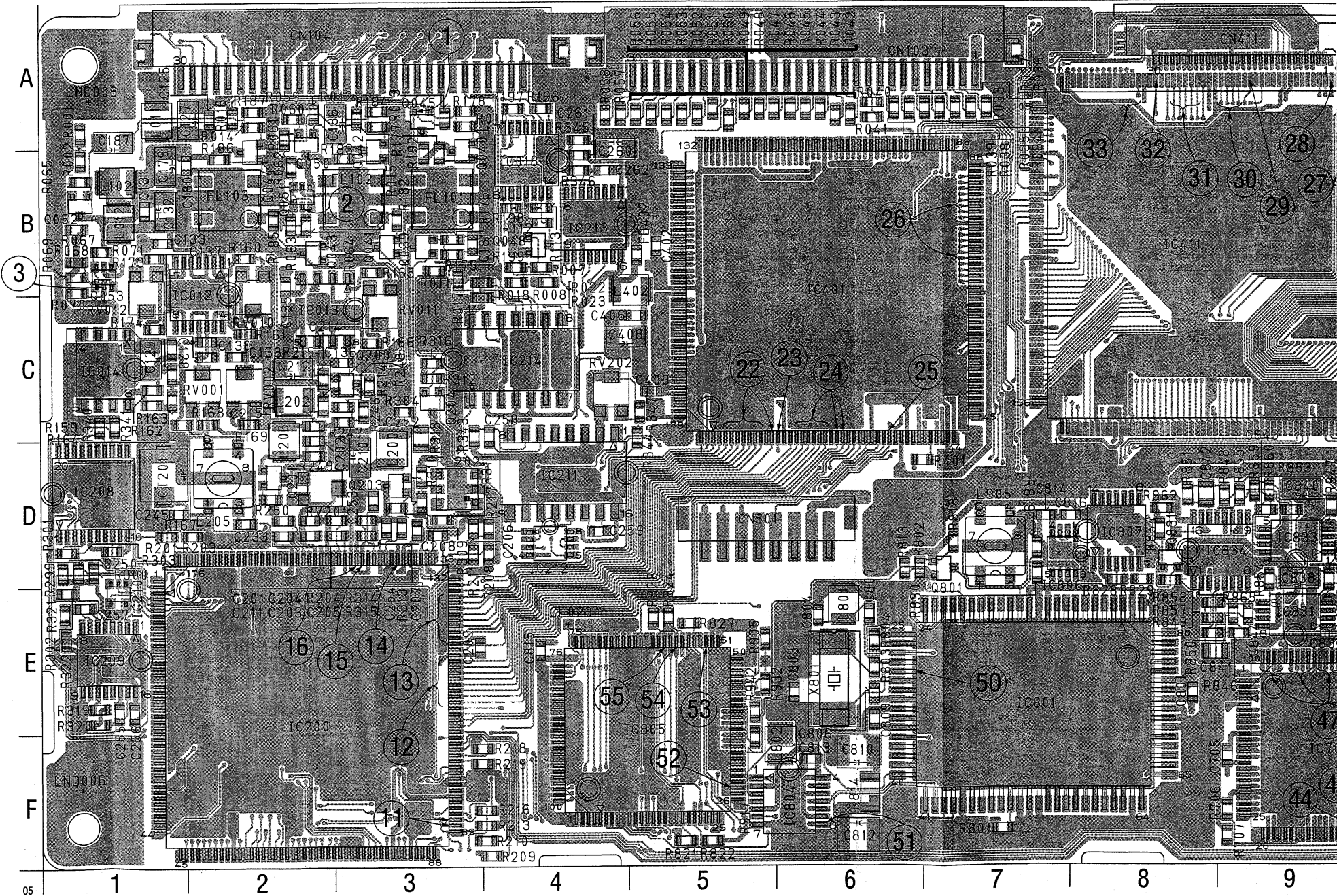
JC-19 BOARD (SIDE A)

CN103 A-6  
CN104 A-3  
CN411 A-9  
CN412 A-10  
CN501 D-5  
CN831 D-10

IC012 C-2  
IC013 C-2  
IC014 C-1  
IC018 B-4  
IC019 C-11  
IC200 E-2  
IC209 E-1  
IC210 E-1  
IC211 D-4  
IC212 D-4  
IC213 B-4  
IC214 C-4  
IC401 B-6  
IC410 B-10  
IC411 B-8  
IC701 F-9  
IC702 E-10  
IC801 E-7  
IC804 F-6  
IC805 E-4  
IC807 D-8  
IC831 E-9  
IC833 D-9  
IC840 D-11

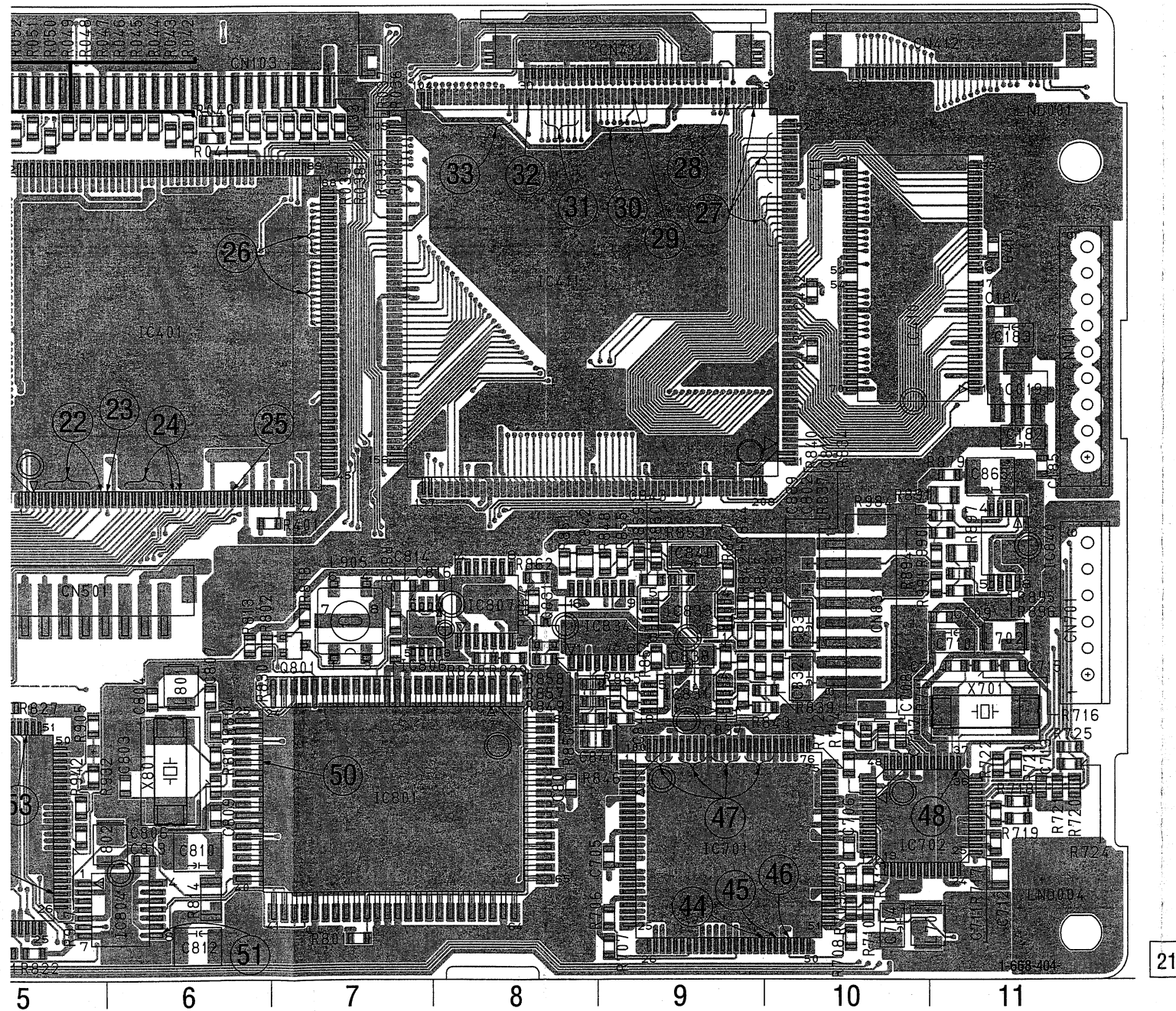
Q039 B-3  
Q040 B-3  
Q041 B-3  
Q042 B-3  
Q043 B-2  
Q044 B-2  
Q045 A-3  
Q048 B-4  
Q050 A-2  
Q051 B-2  
Q052 B-1  
Q053 B-1  
Q200 C-3  
Q201 D-2  
Q801 D-7

JC-19 BOARD (SIDE A)

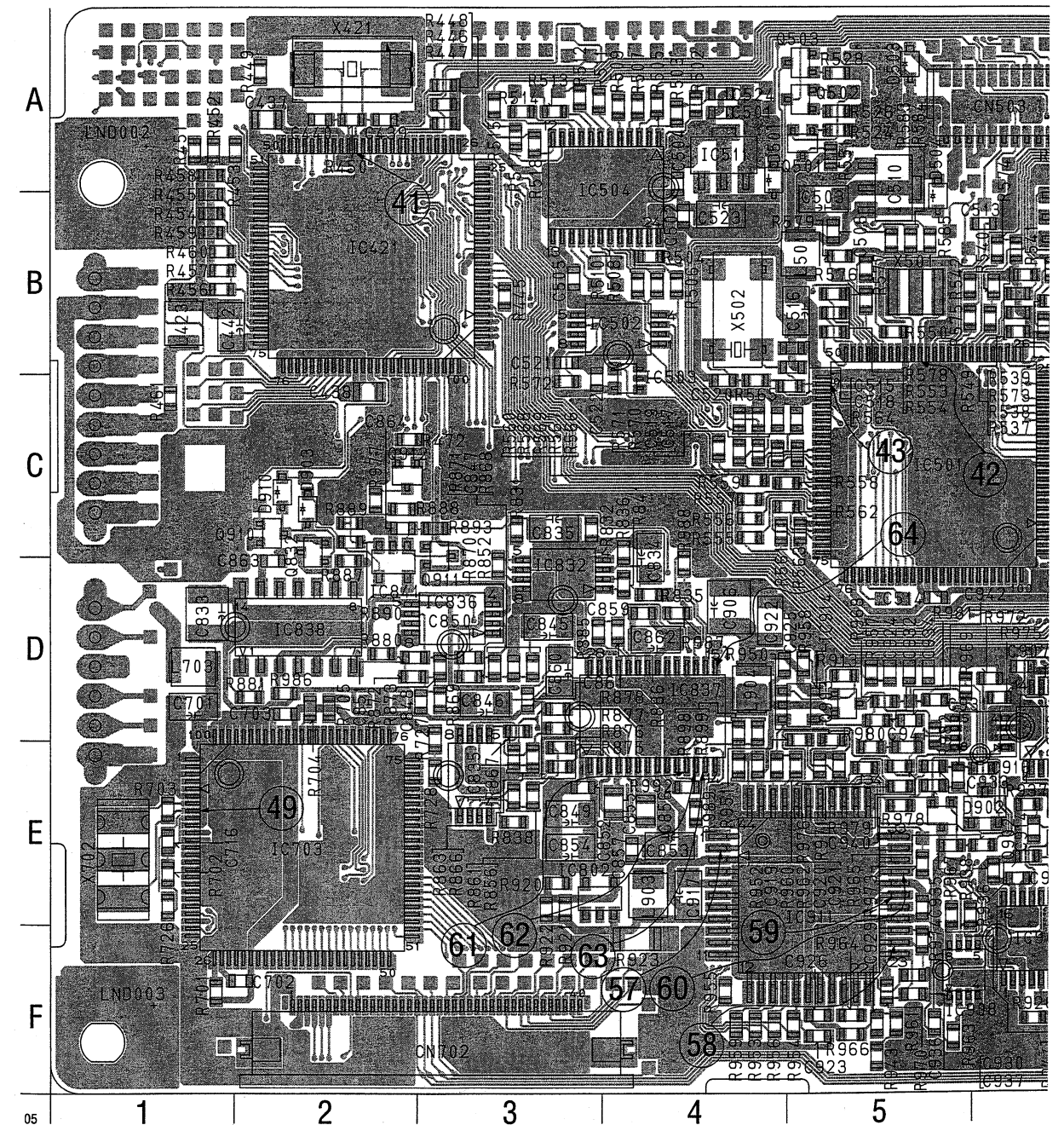




- **For Printed Wiring Board.**
- JC-19 board is six-layer print board. However, the patterns of layers 2 to 5 have not been included in the diagram.
- There are few cases that the part isn't mounted in this model is printed on this diagram.
- Chip transistor



**JC-19 BOARD (SIDE B)**





patterns of  
am.  
this model

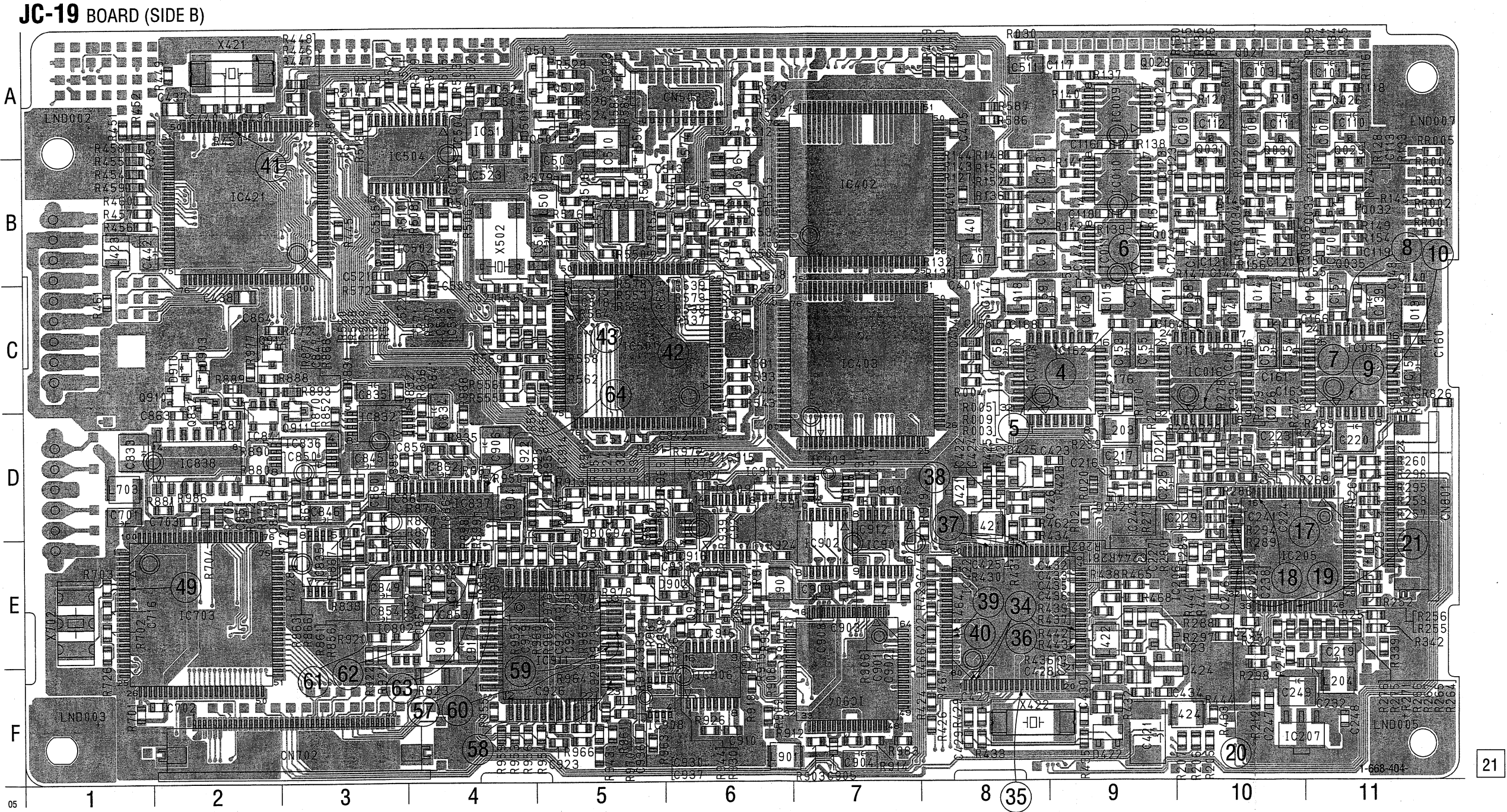
JC-19 BOARD (SIDE B)

CN101 B-1  
CN503 A-6  
CN701 D-1

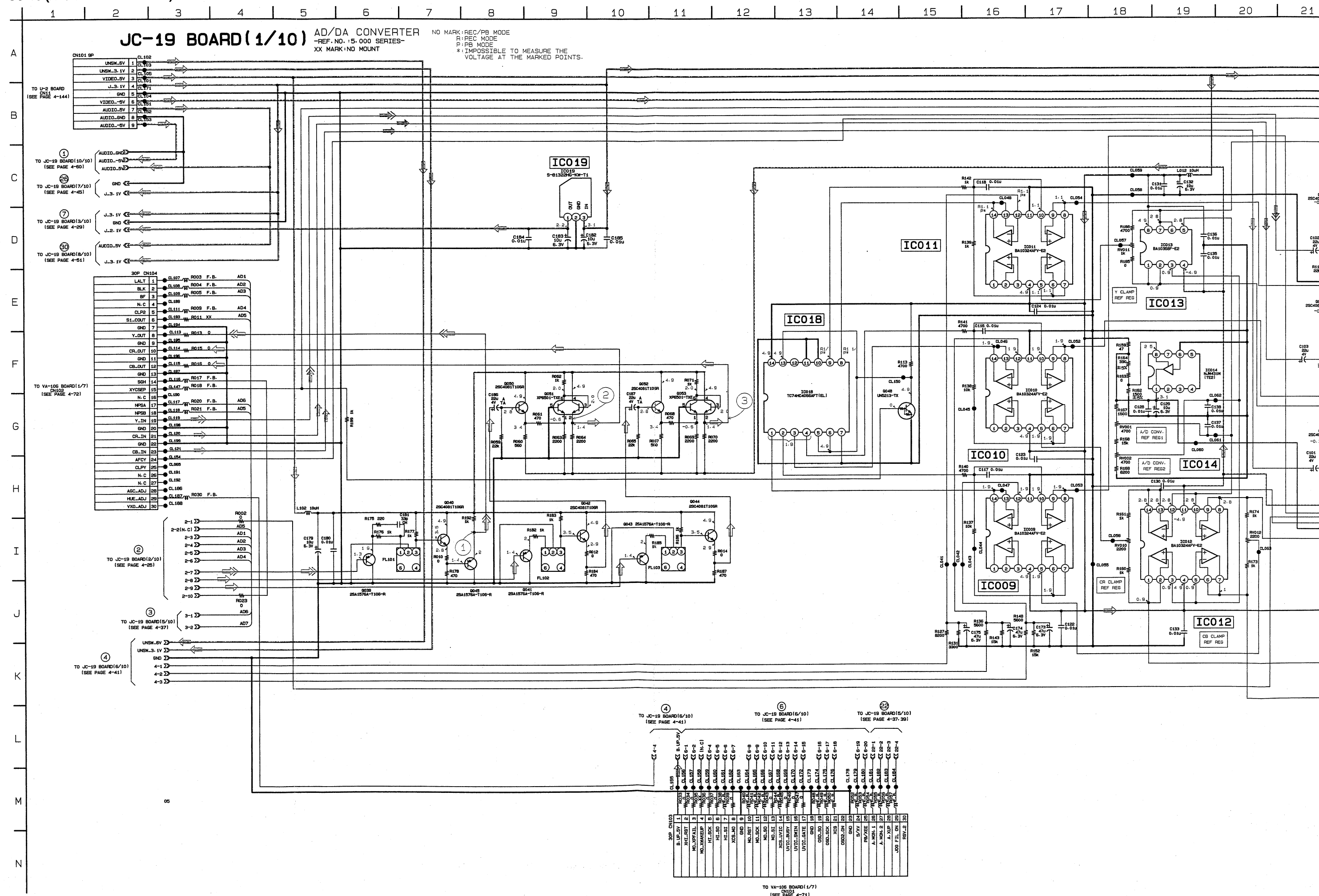
D201 D-9  
D421 D-8  
D422 F-9  
D423 E-9  
D424 E-9  
D425 D-8  
D501 A-4  
D503 A-5  
D504 B-5  
D901 E-6  
D902 E-6  
D903 C-2  
D910 C-2

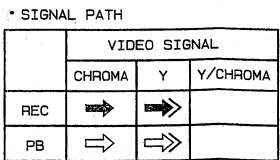
IC009 A-9  
IC010 B-9  
IC011 B-9  
IC015 C-11  
IC016 C-10  
IC017 C-9  
IC205 E-10  
IC206 E-10  
IC207 F-10  
IC402 B-7  
IC403 C-7  
IC421 B-2  
IC422 E-8  
IC501 C-5  
IC502 B-4  
IC503 B-4  
IC504 A-4  
IC510 A-5  
IC511 A-4  
IC703 E-2  
IC802 E-3  
IC832 D-3  
IC835 E-3  
IC836 D-3  
IC837 D-4  
IC838 D-2  
IC841 D-2  
IC901 D-7  
IC902 D-7  
IC903 D-7  
IC904 F-7  
IC906 F-6  
IC907 D-6  
IC908 F-5  
IC909 D-6  
IC911 E-5  
IC914 D-5  
IC915 D-6  
IC916 D-6

Q026 A-11  
Q027 A-10  
Q028 A-10  
Q029 A-11  
Q030 A-10  
Q031 A-10  
Q032 B-11  
Q033 B-10  
Q034 B-10  
Q035 B-11  
Q036 B-10  
Q037 B-10  
Q501 A-5  
Q502 A-5  
Q504 B-6  
Q505 B-6  
Q506 B-6  
Q832 C-2  
Q902 E-6  
Q903 D-5  
Q910 C-2  
Q911 C-3



# JC-19 (AD/DA CONVERTER) SCHEMATIC DIAGRAM

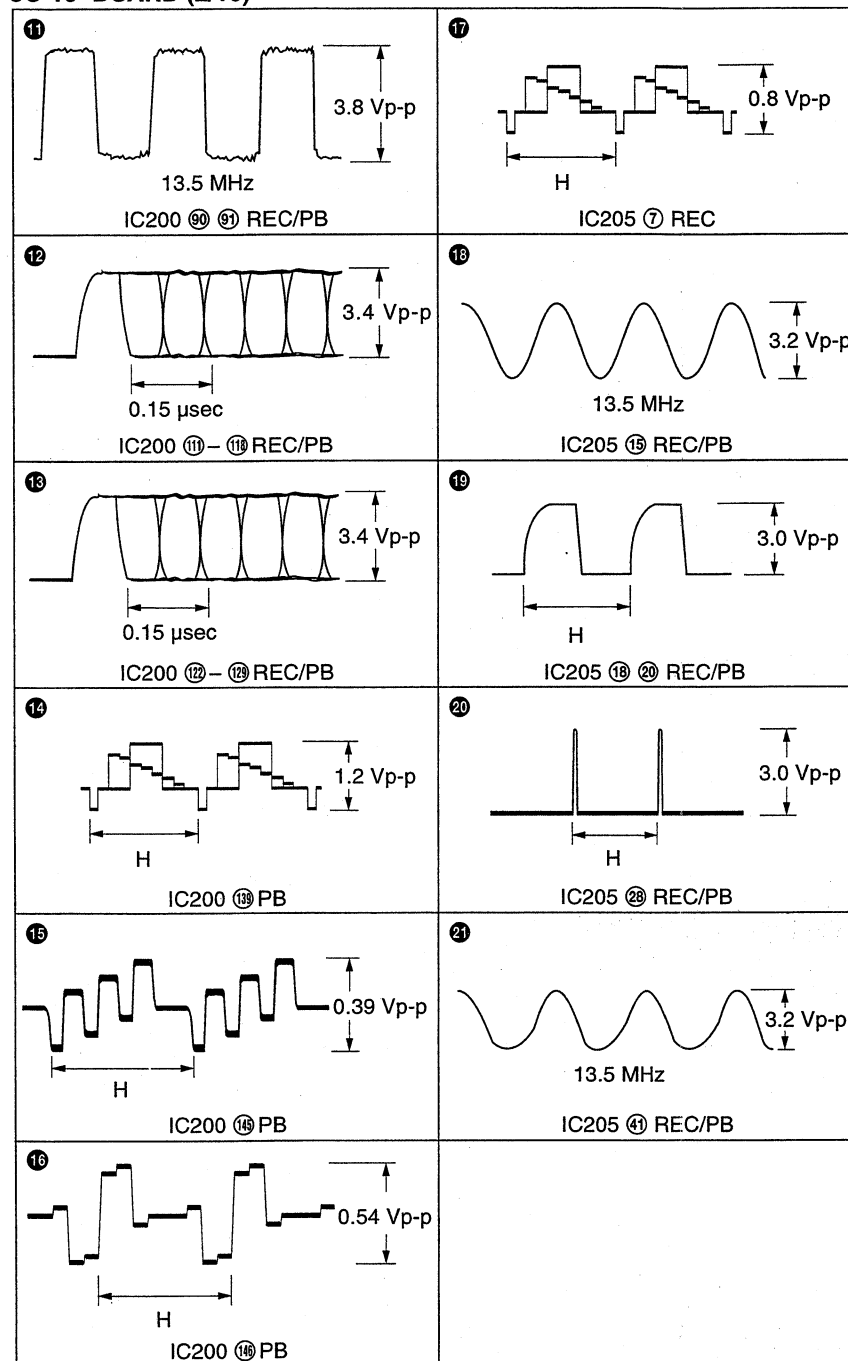




<p>①</p> <p>0.54 V<sub>p-p</sub></p> <p>H</p> <p>Q045 ⑤ PB</p>	<p>⑥</p> <p>0.9 V<sub>p-p</sub></p> <p>H</p> <p>IC016 ⑫ REC</p>
<p>②</p> <p>0.54 V<sub>p-p</sub></p> <p>H</p> <p>Q051 ② PB</p>	<p>⑦</p> <p>3.6 V<sub>p-p</sub></p> <p>0.15 μsec</p> <p>IC016 ① – ⑧ REC</p>
<p>③</p> <p>0.39 V<sub>p-p</sub></p> <p>H</p> <p>Q053 ② PB</p>	<p>⑧</p> <p>0.8 V<sub>p-p</sub></p> <p>H</p> <p>IC015 ⑫ REC</p>
<p>④</p> <p>2.0 V<sub>p-p</sub></p> <p>H</p> <p>IC017 ⑫ REC</p>	<p>⑨</p> <p>3.6 V<sub>p-p</sub></p> <p>0.15 μsec</p> <p>IC015 ① – ⑧ REC</p>
<p>⑤</p> <p>3.6 V<sub>p-p</sub></p> <p>0.15 μsec</p> <p>IC017 ① – ⑧ REC</p>	<p>⑩</p> <p>3.4 V<sub>p-p</sub></p> <p>13.5 MHz</p> <p>IC015 – IC017 ⑫ REC/PB</p>

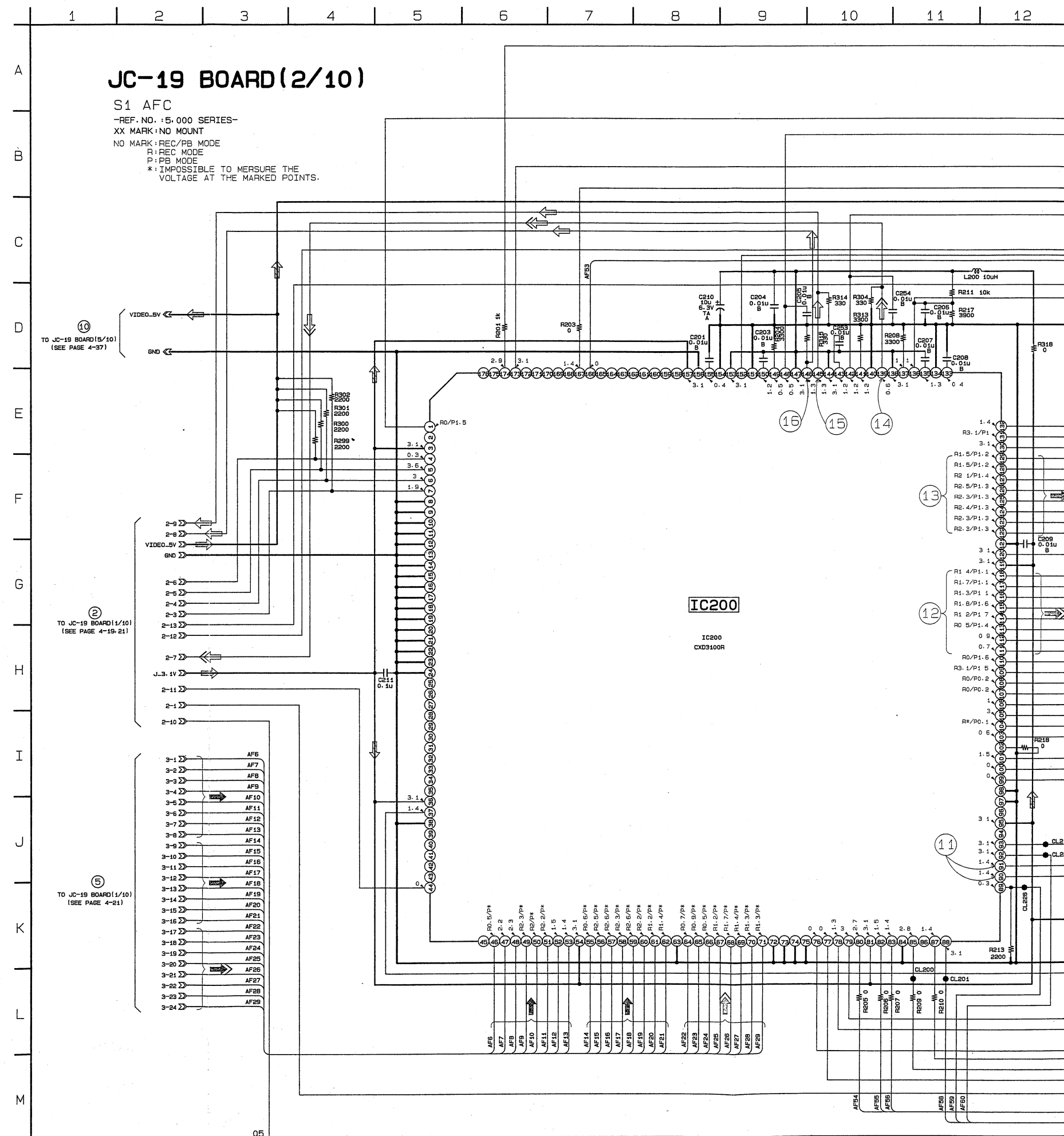


JC-19 BOARD (2/10)



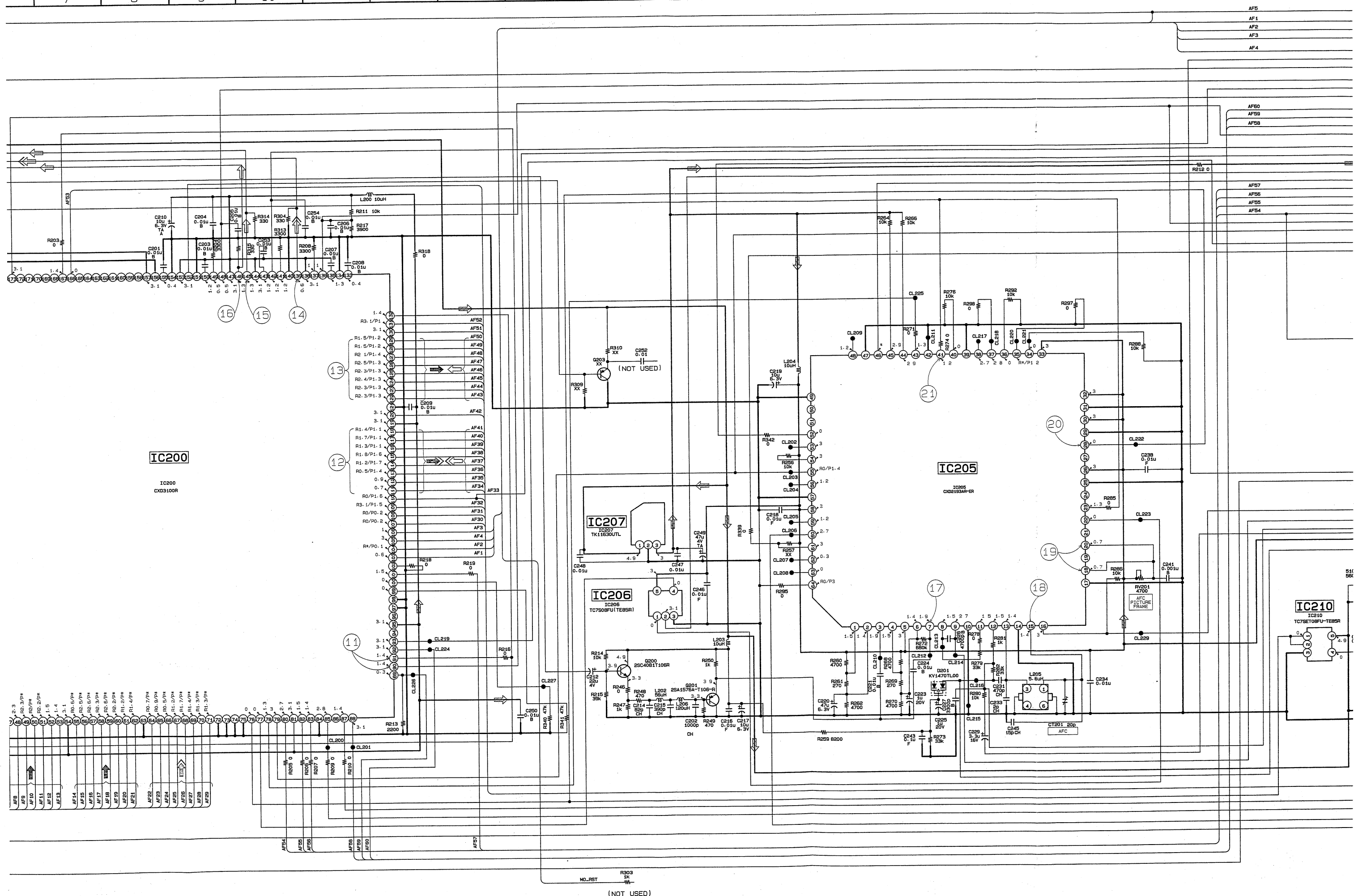
JC-19 BOARD (2/10)

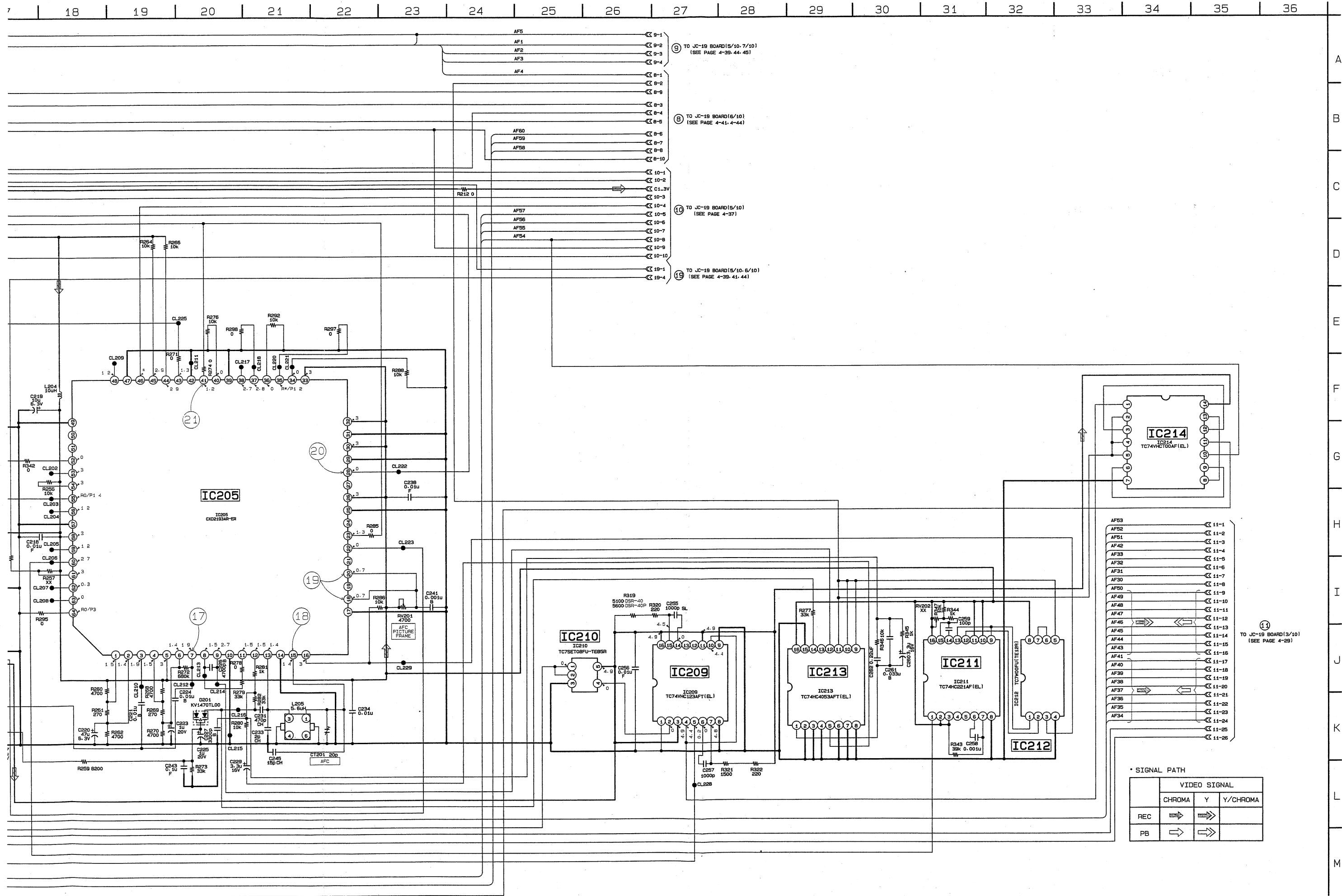
S1 AFC  
-REF. NO.: 5-000 SERIES-  
XX MARK: NO MOUNT  
NO MARK: REC/PB MODE  
R: REC MODE  
P: PB MODE  
\*: IMPOSSIBLE TO MEASURE THE  
VOLTAGE AT THE MARKED POINTS.

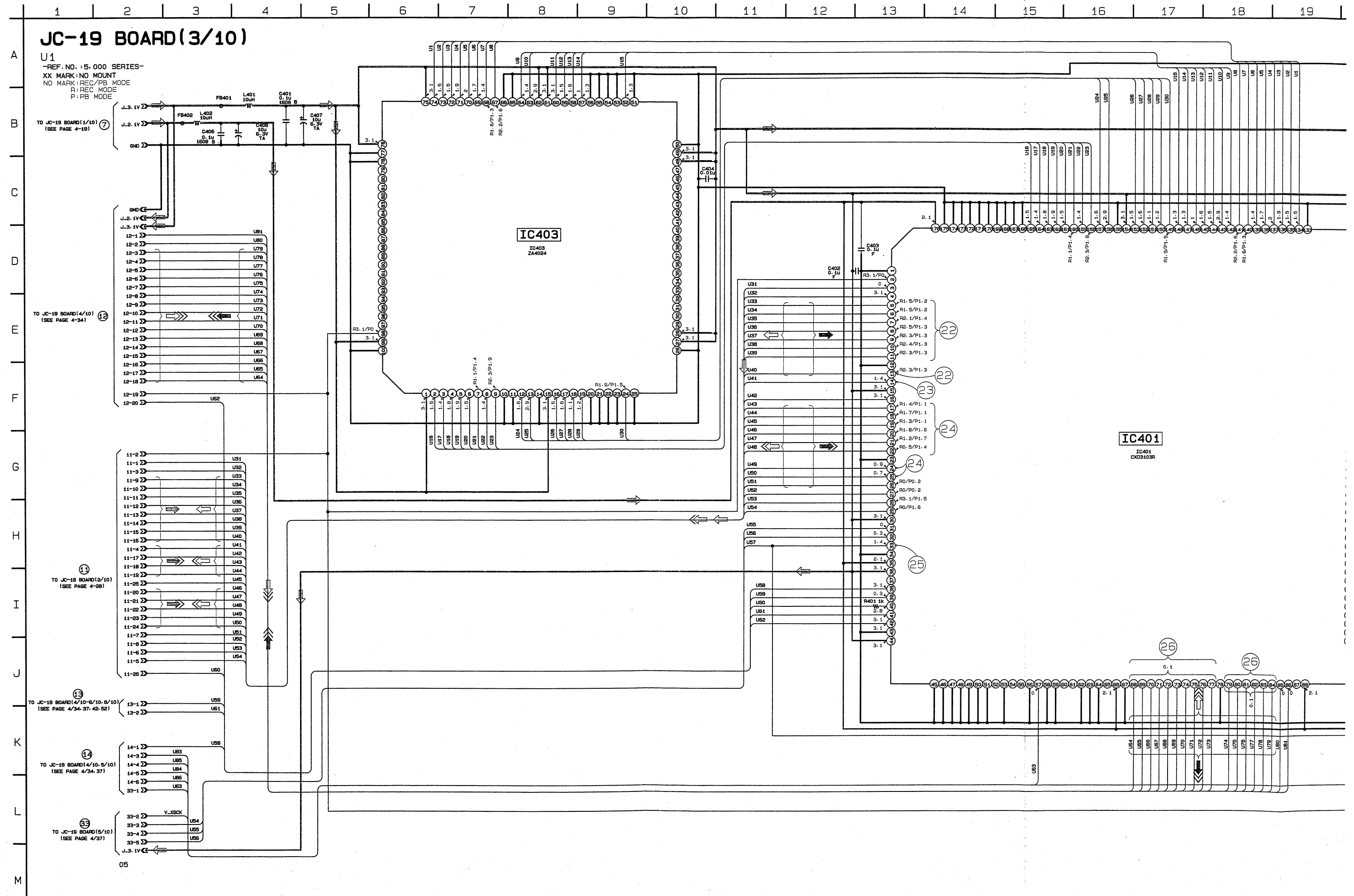


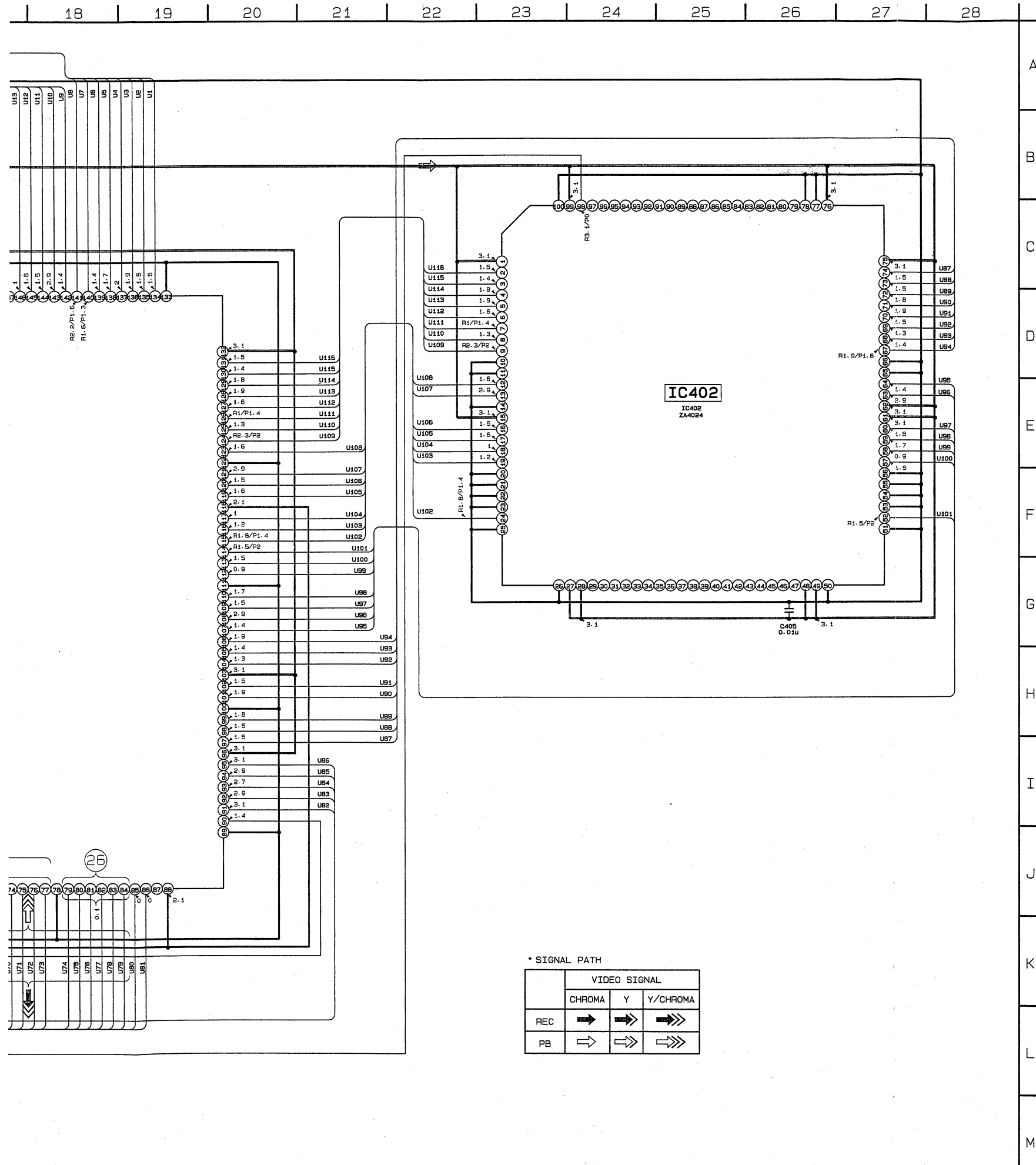
wiring board.

7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
---	---	---	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----

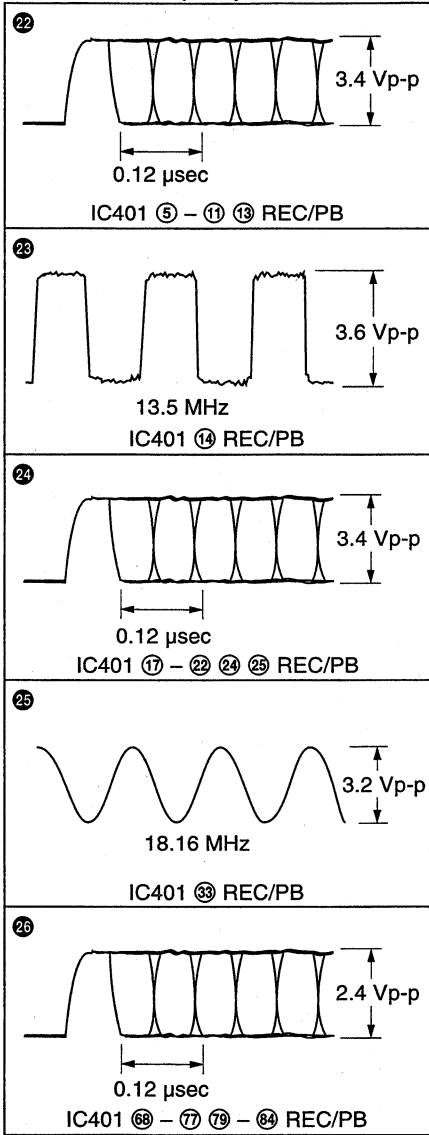


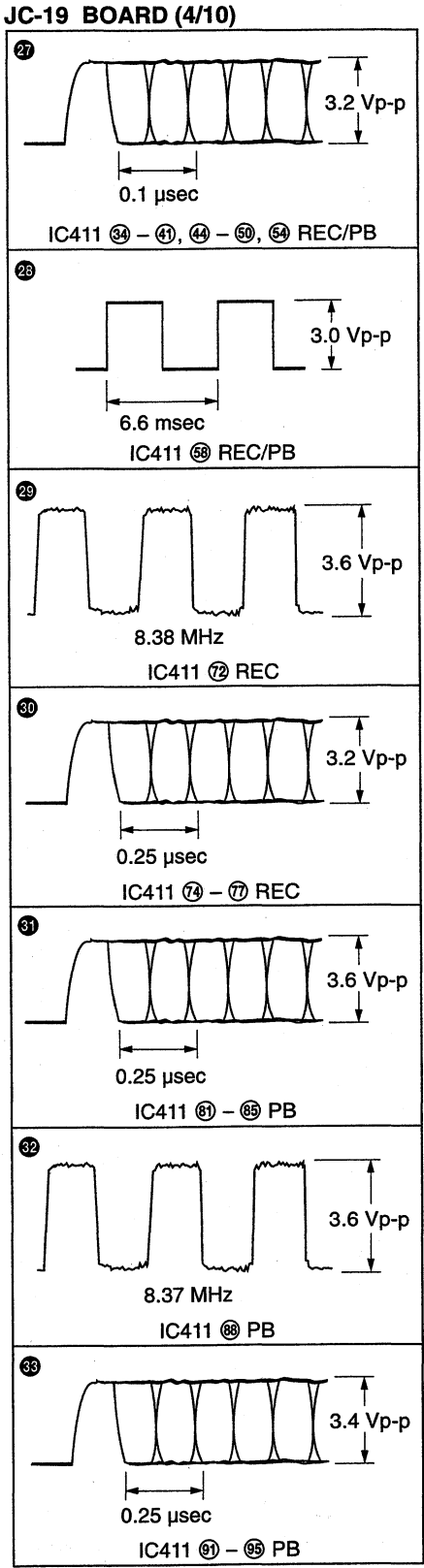




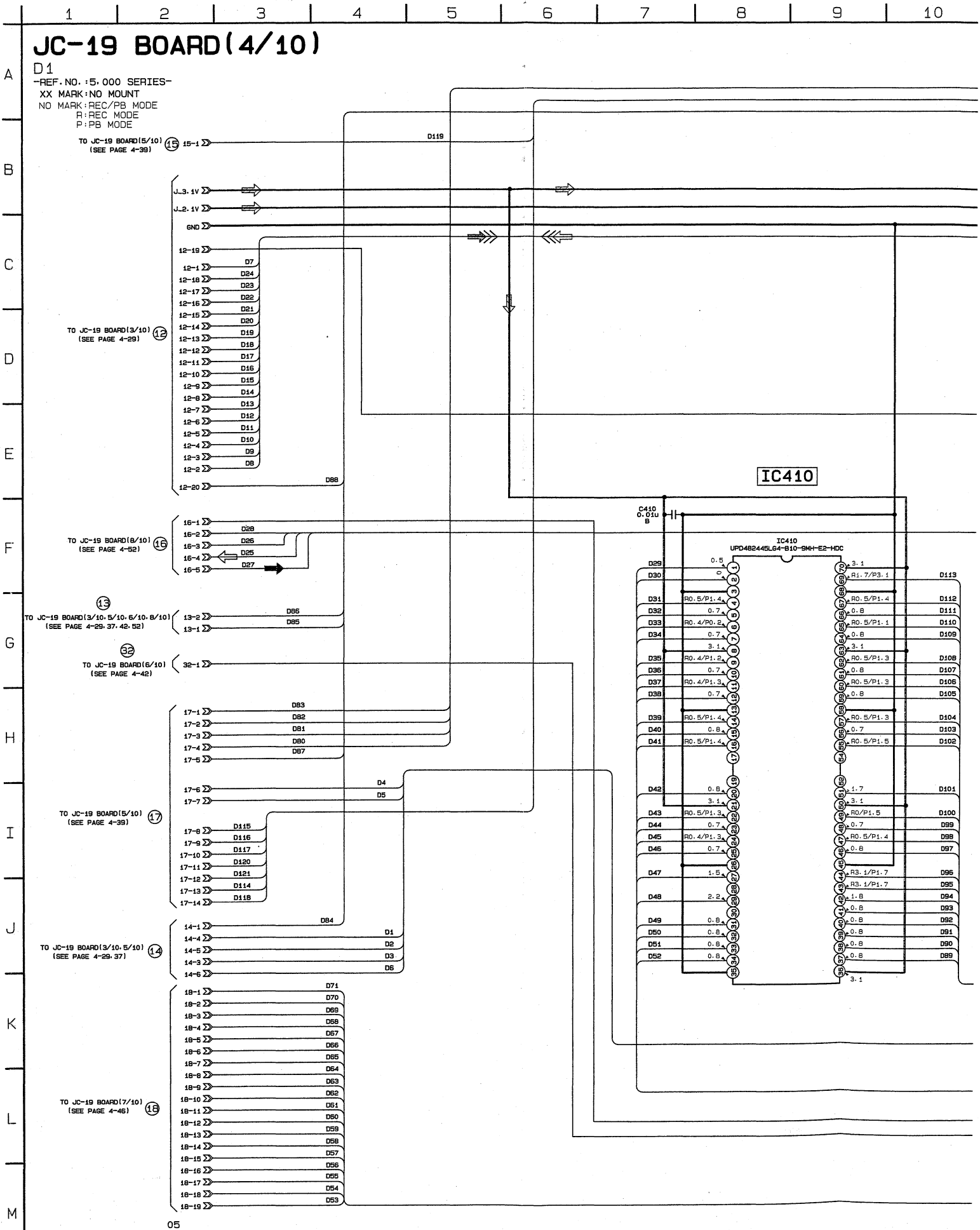


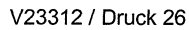
JC-19 BOARD (3/10)





JC-19 (D1) SCHEMATIC DIAGRAM • See page 4-14 for JC-19 printed wiring board.

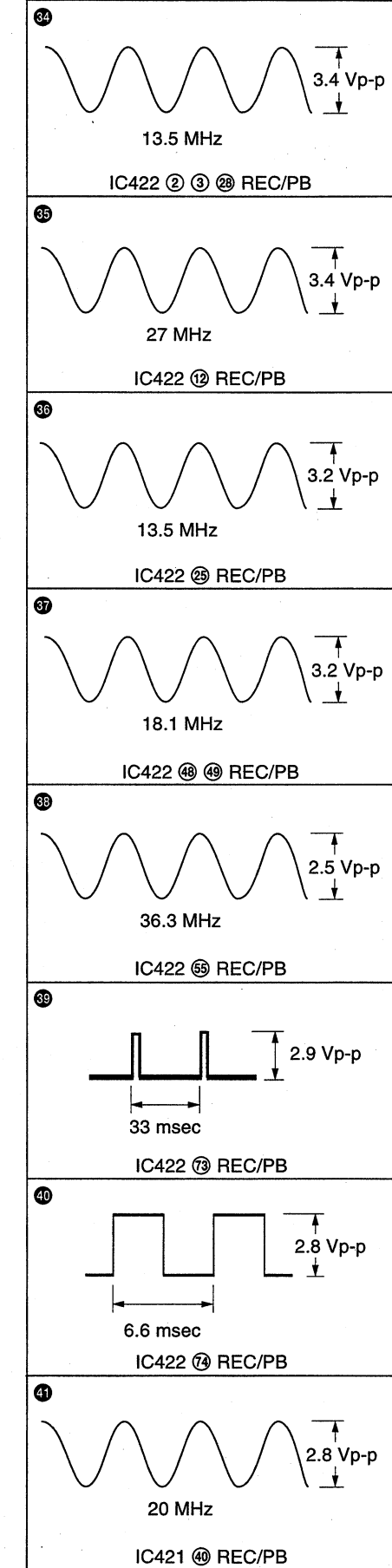
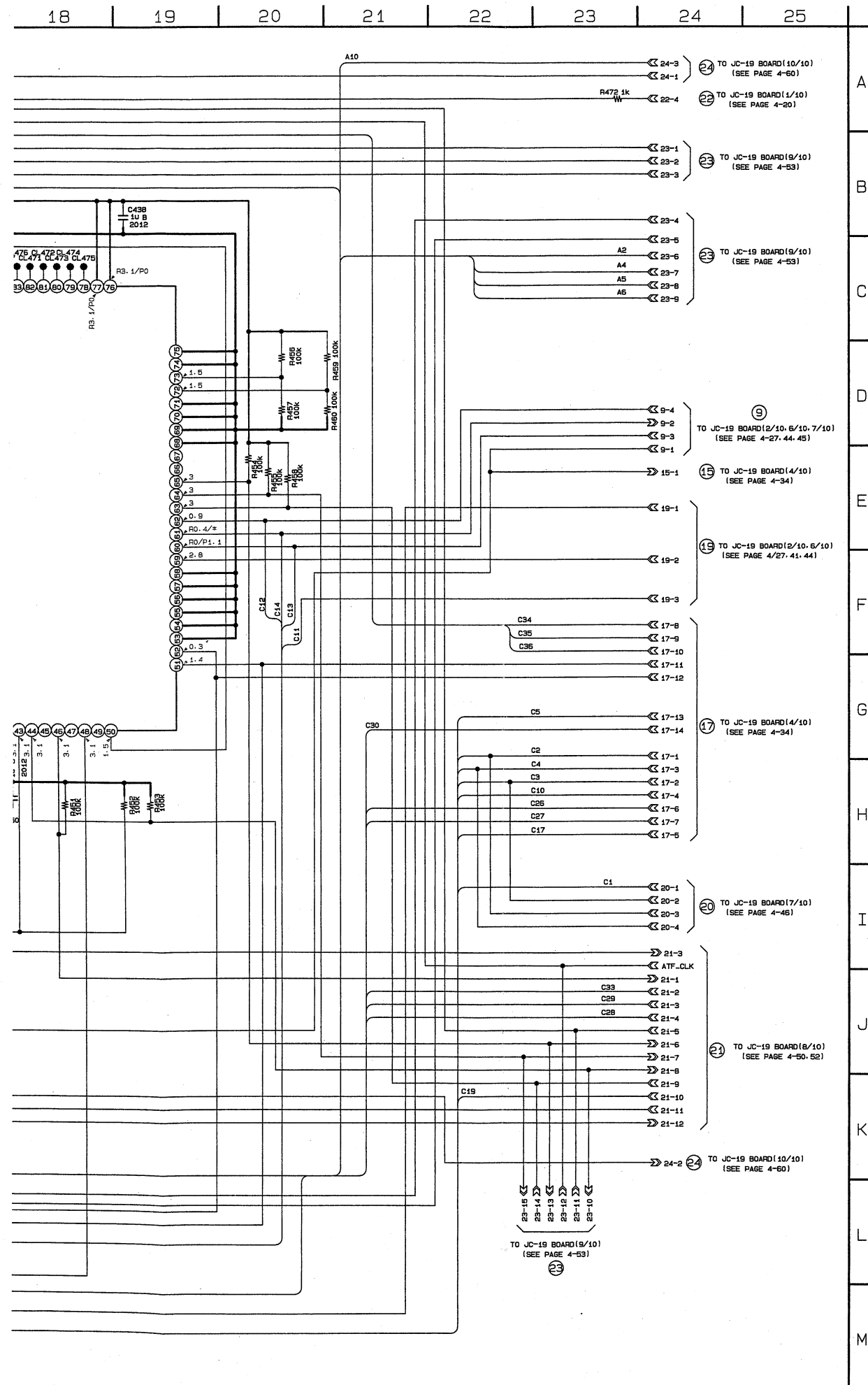


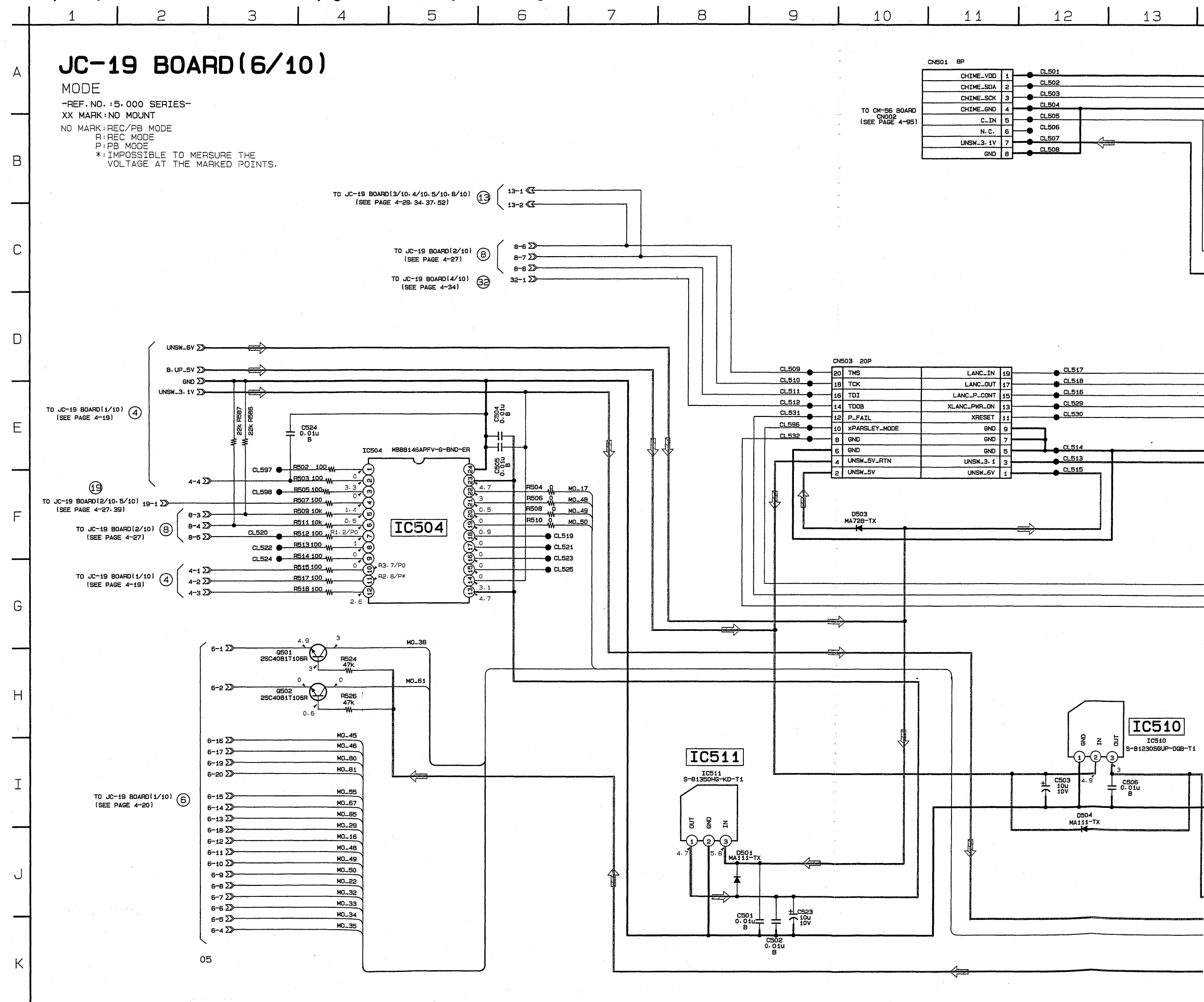


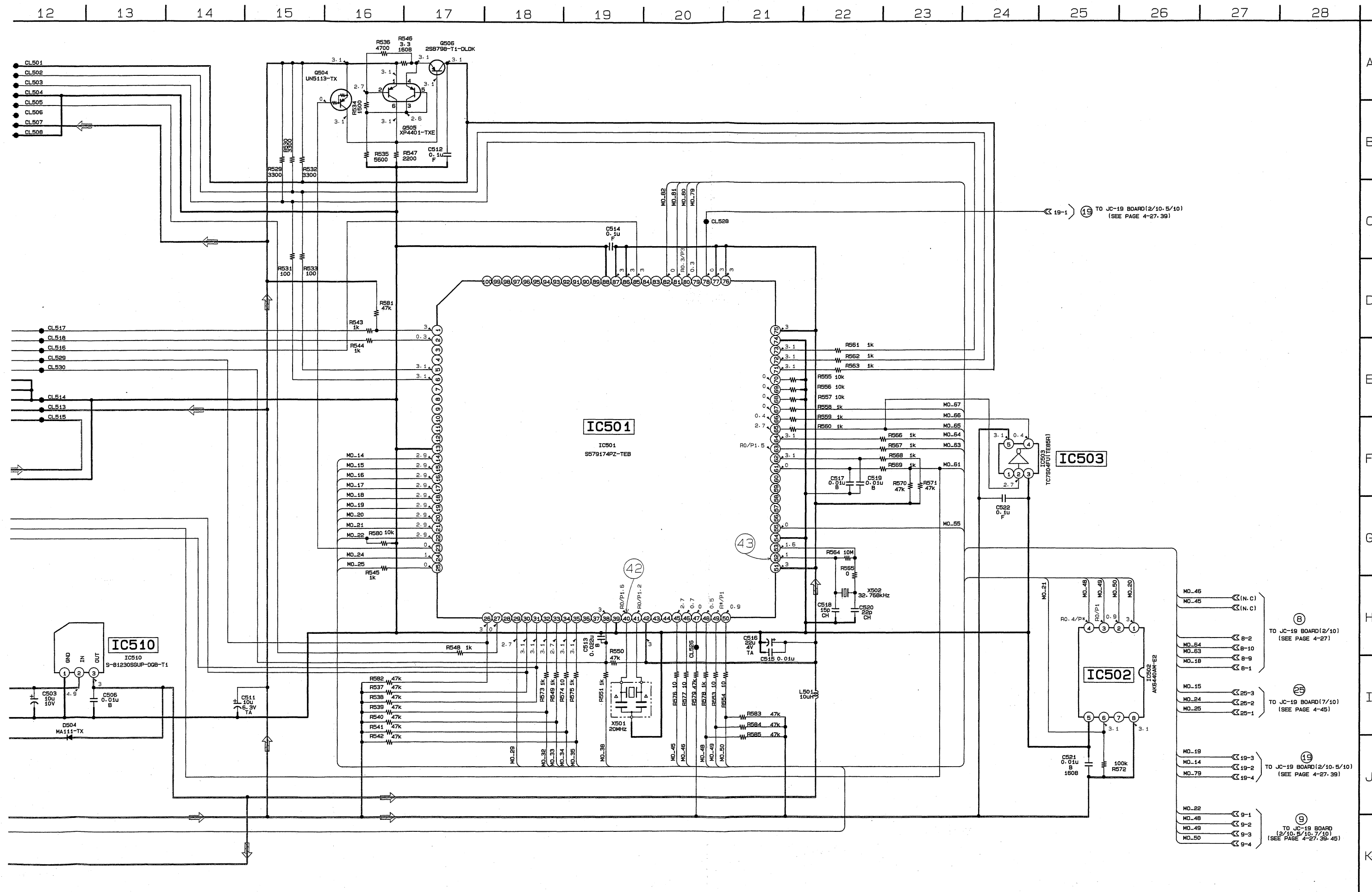


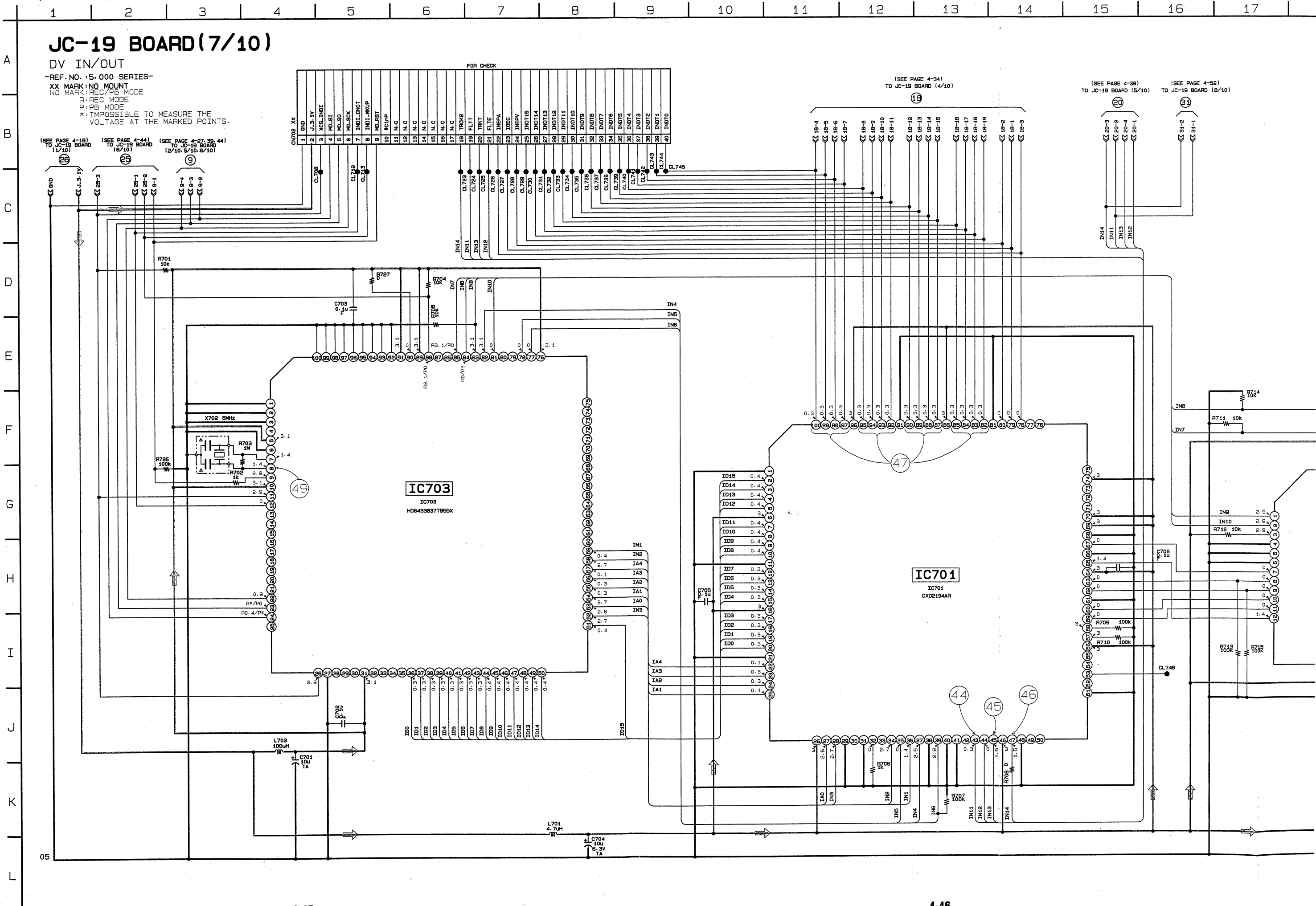


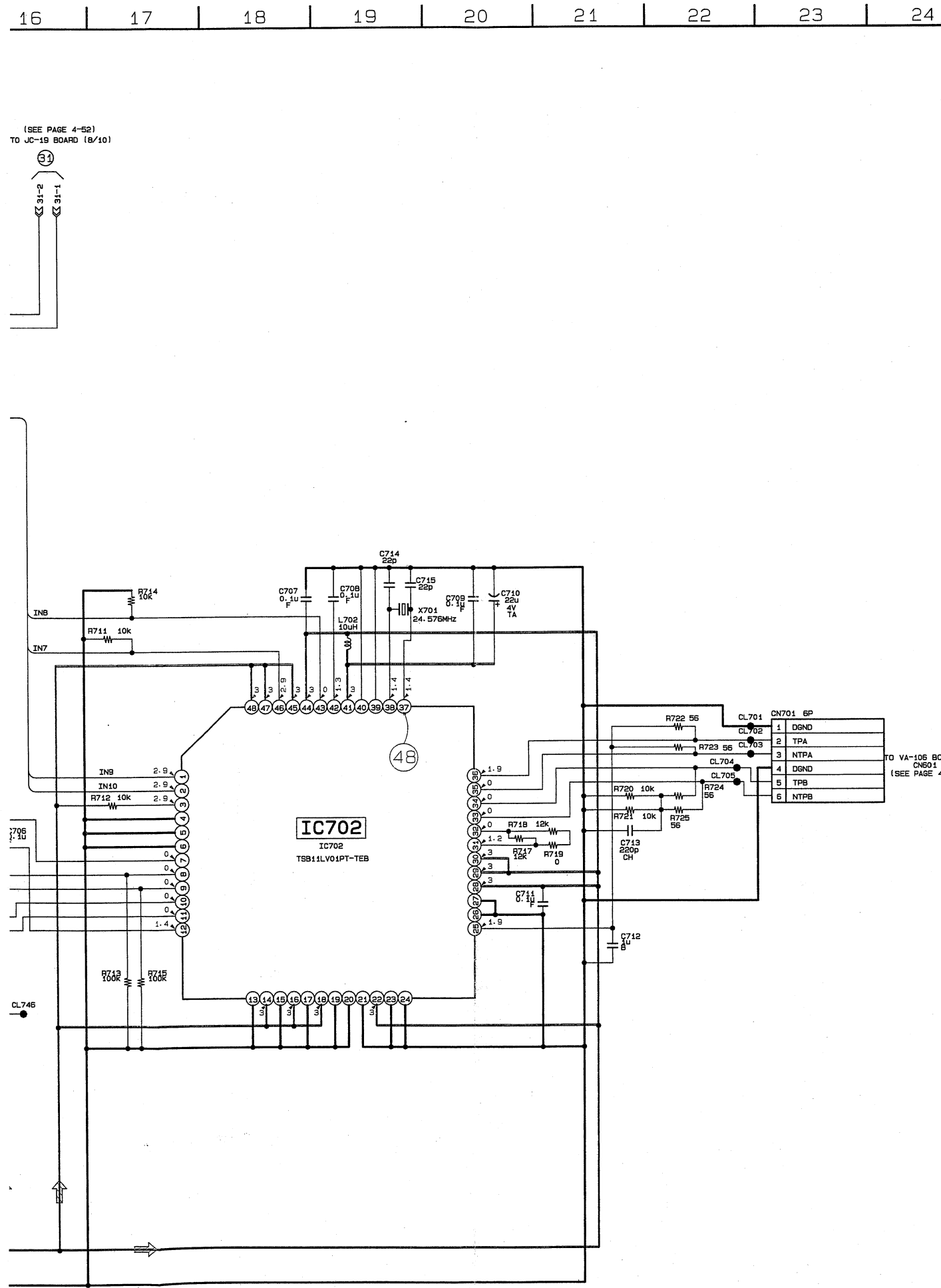




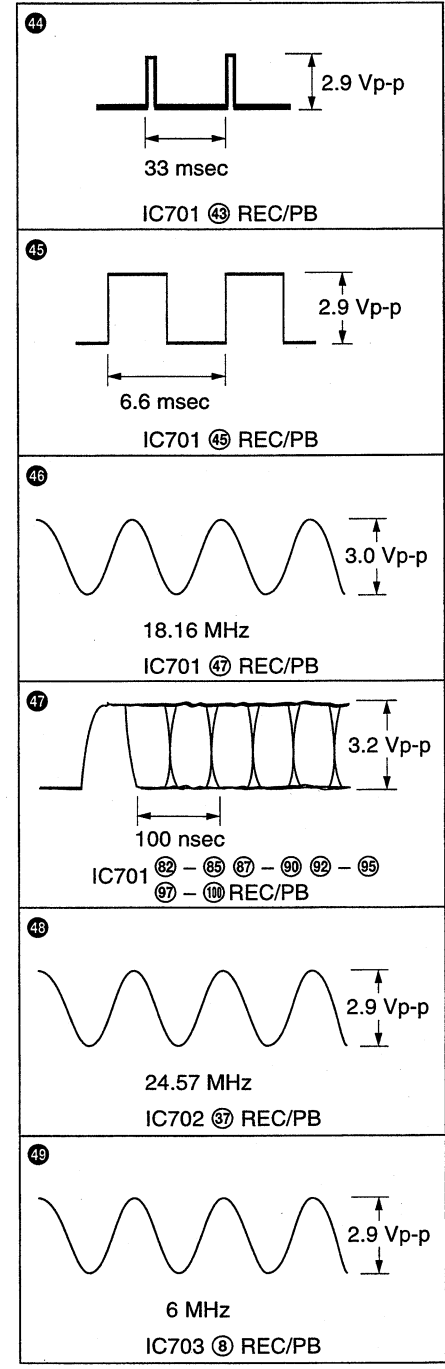




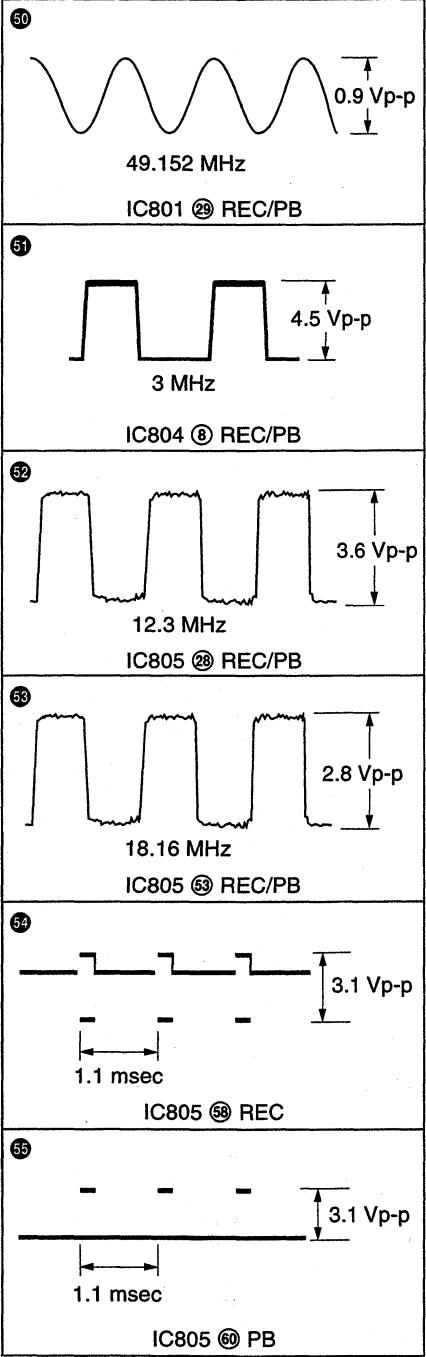




JC-19 BOARD (7/10)

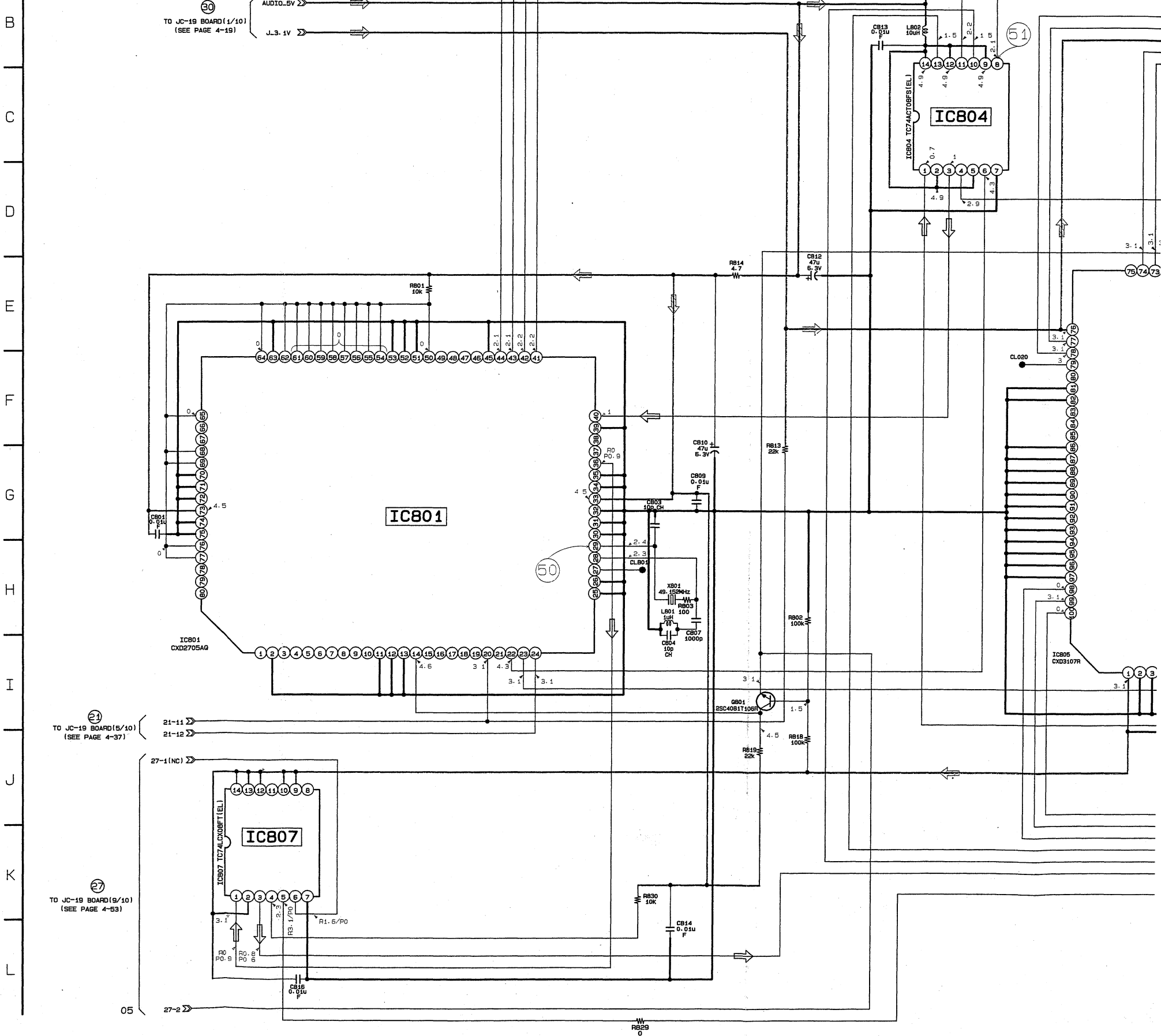


JC-19 BOARD (8/10)



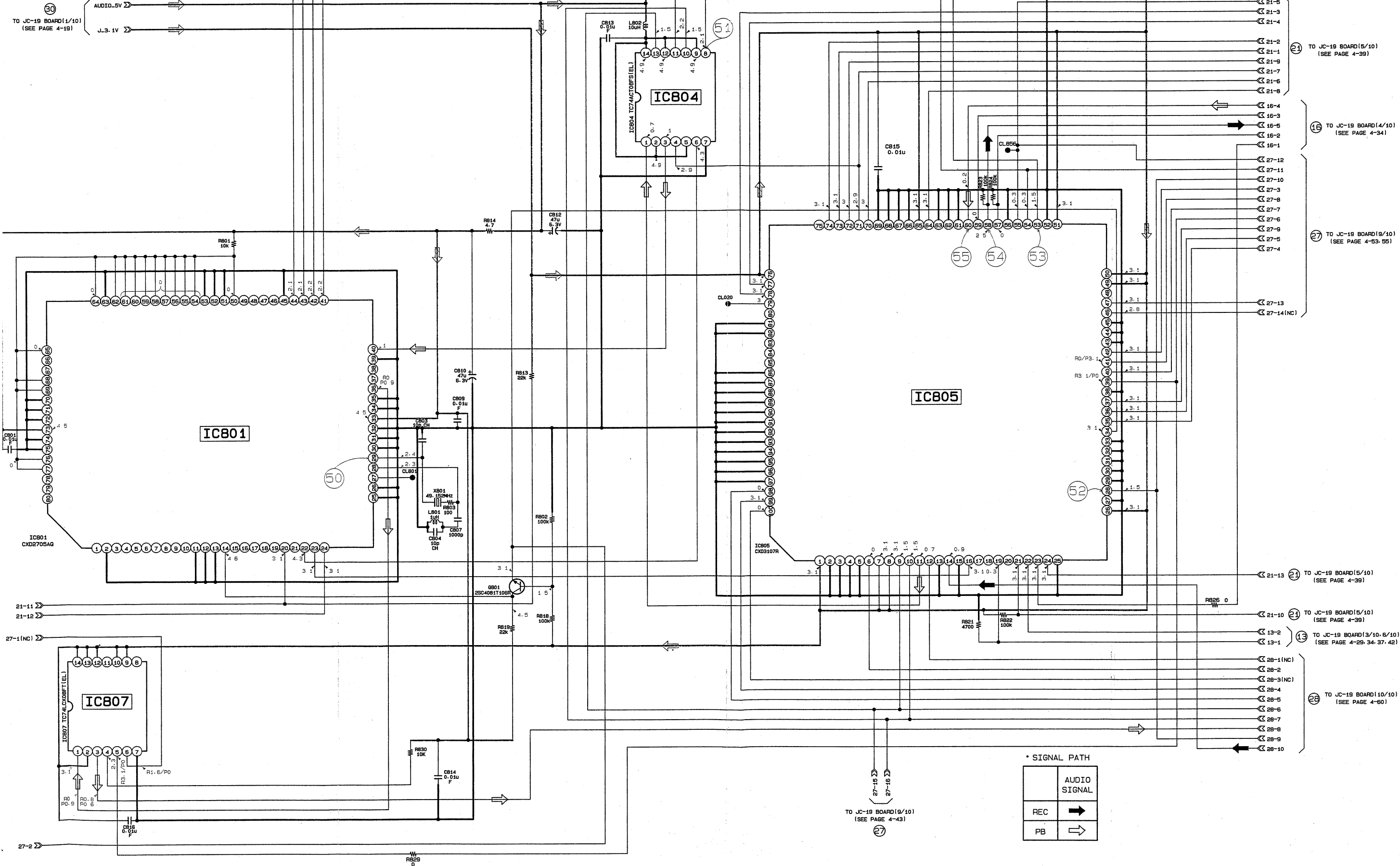
JC-19 BOARD (8/10)  
AUDIO CORE

REF. NO. : 5.000 SERIES-  
XX MARK: NO MOUNT  
NO MARK: REC/PB MODE  
R: REC MODE  
P: PB MODE



BOARD (8/10)

IES-  
DE



• SIGNAL PATH

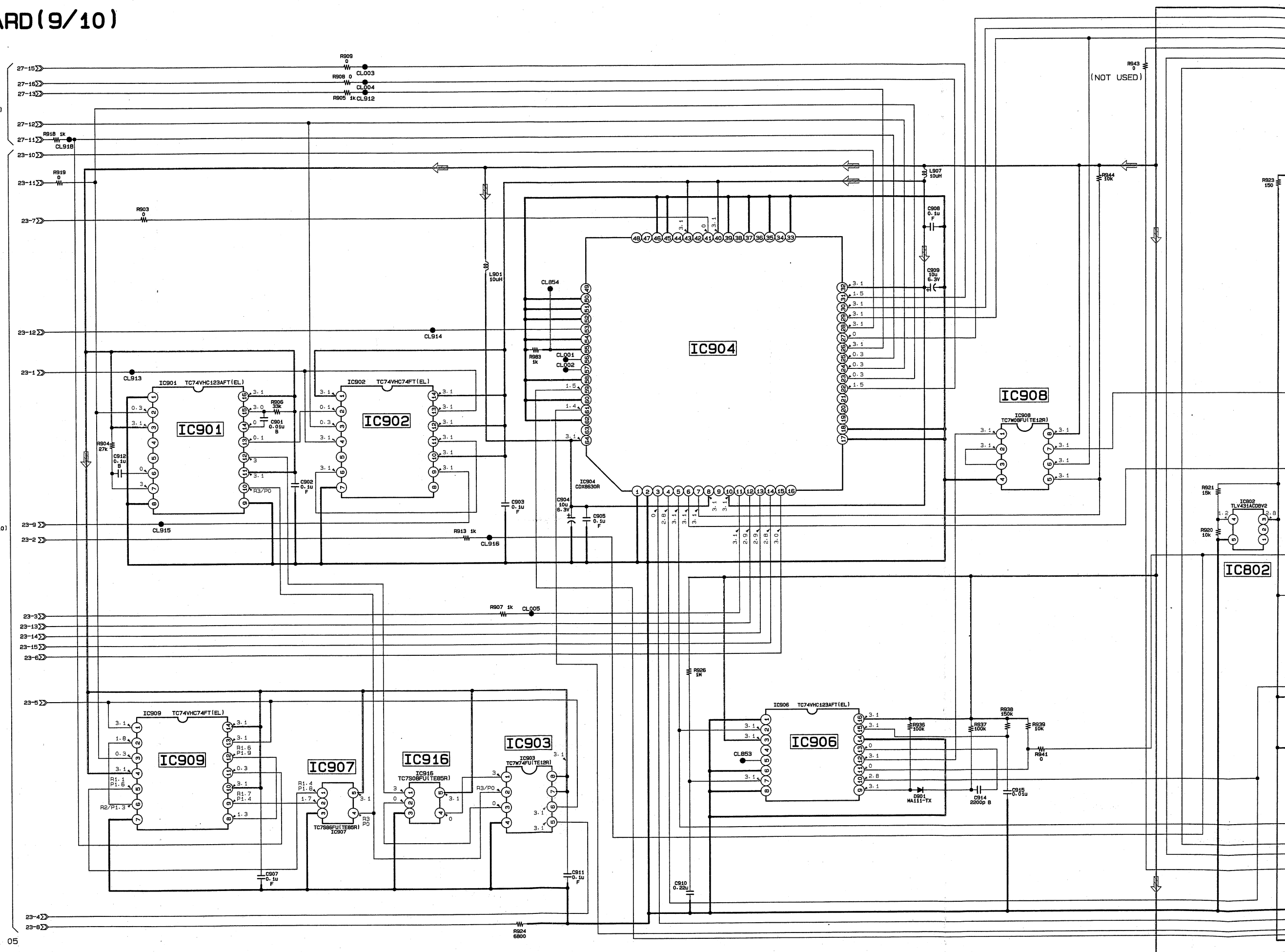
	AUDIO SIGNAL
REC	→
PB	→

# JC-19 BOARD(9/10)

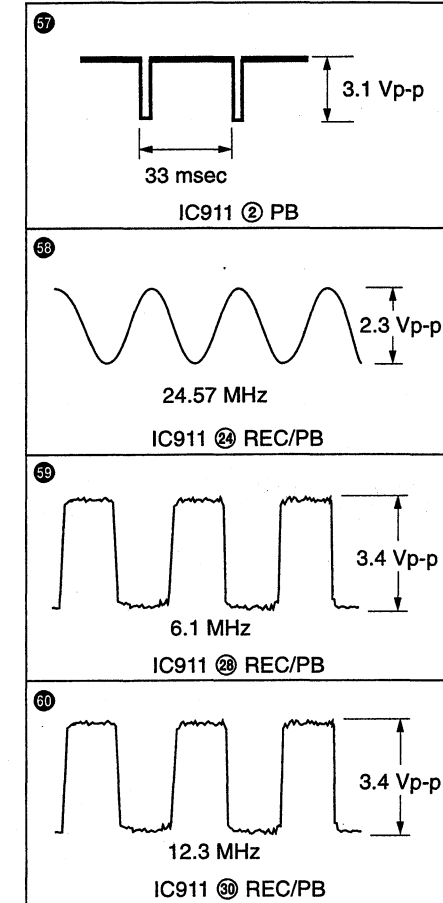
DIGITAL AUDIO  
REF. NO. : 5.000 SERIES-  
XX MARK: NO MOUNT  
NO MARK: REC/PB MODE  
R: REC. MODE  
P: PB. MODE

TO JC-19 BOARD(8/10)  
(SEE PAGE 4-50)

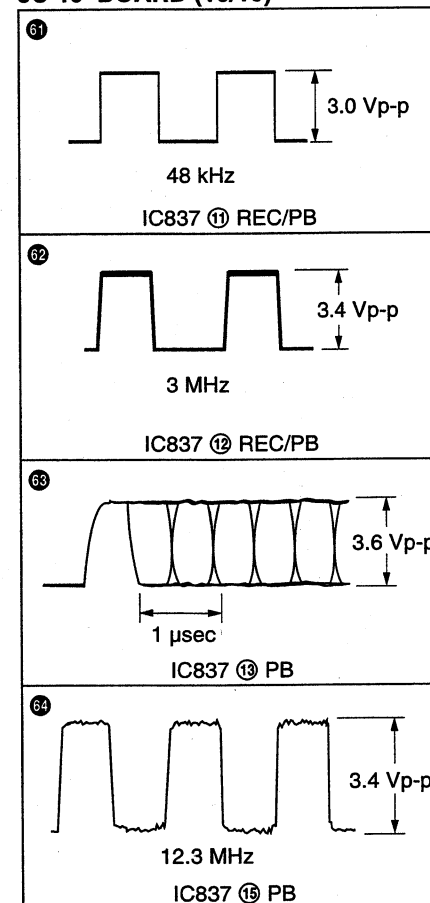
TO JC-19 BOARD(5/10)  
(SEE PAGE 4-39)







**JC-19 BOARD (10/10)**



**4-58**

## AUDIO D/A, A/D CONVERTER

V23312 / Druck 37

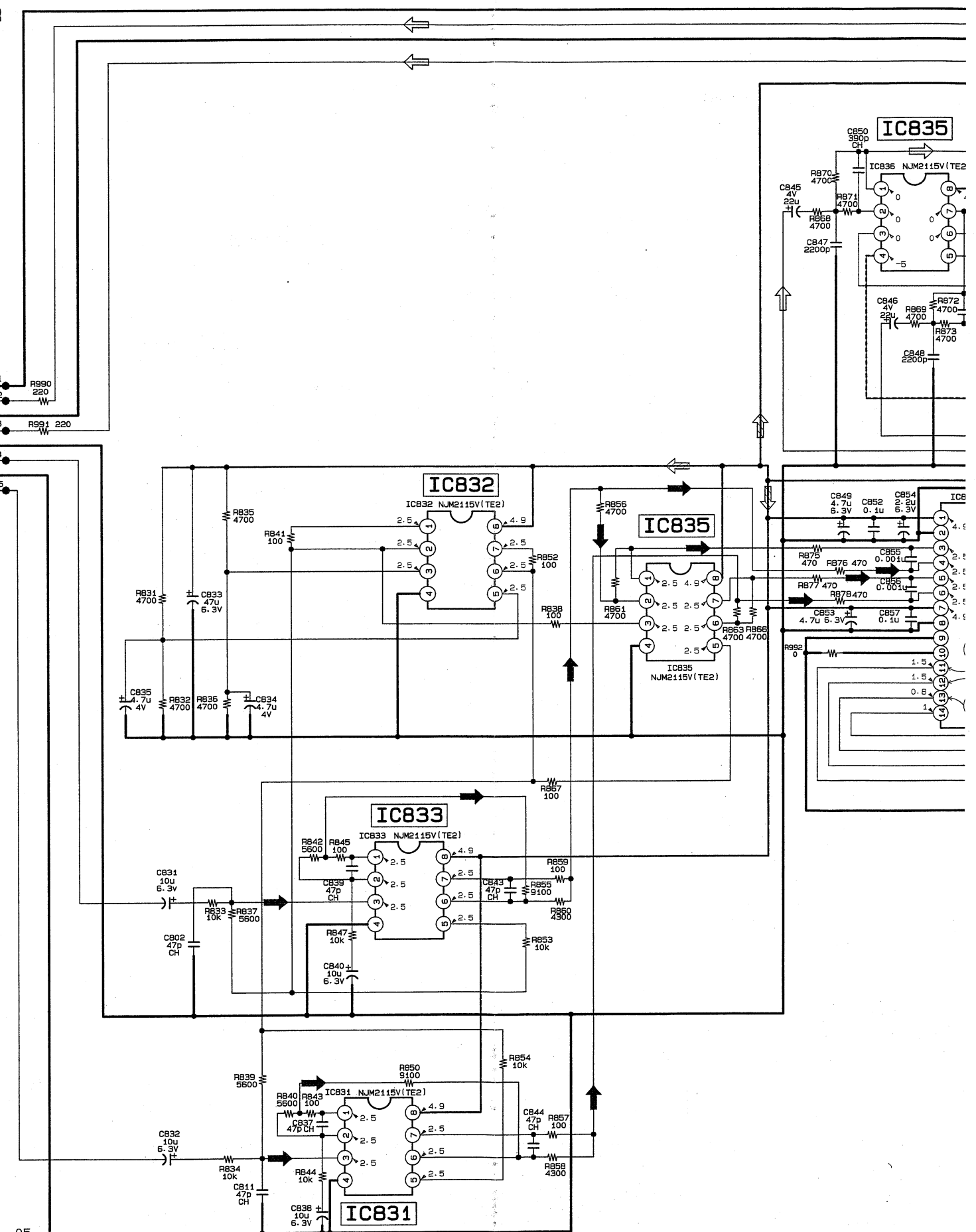
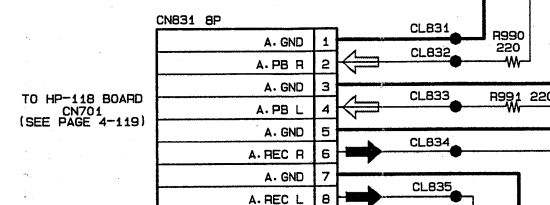
JC-19 BOARD (10/10)

A | AUDIO D/A, A/D CONVERTER

-REF. NO. : 5,000 SERIES-

XX MARK:NO MOUNT

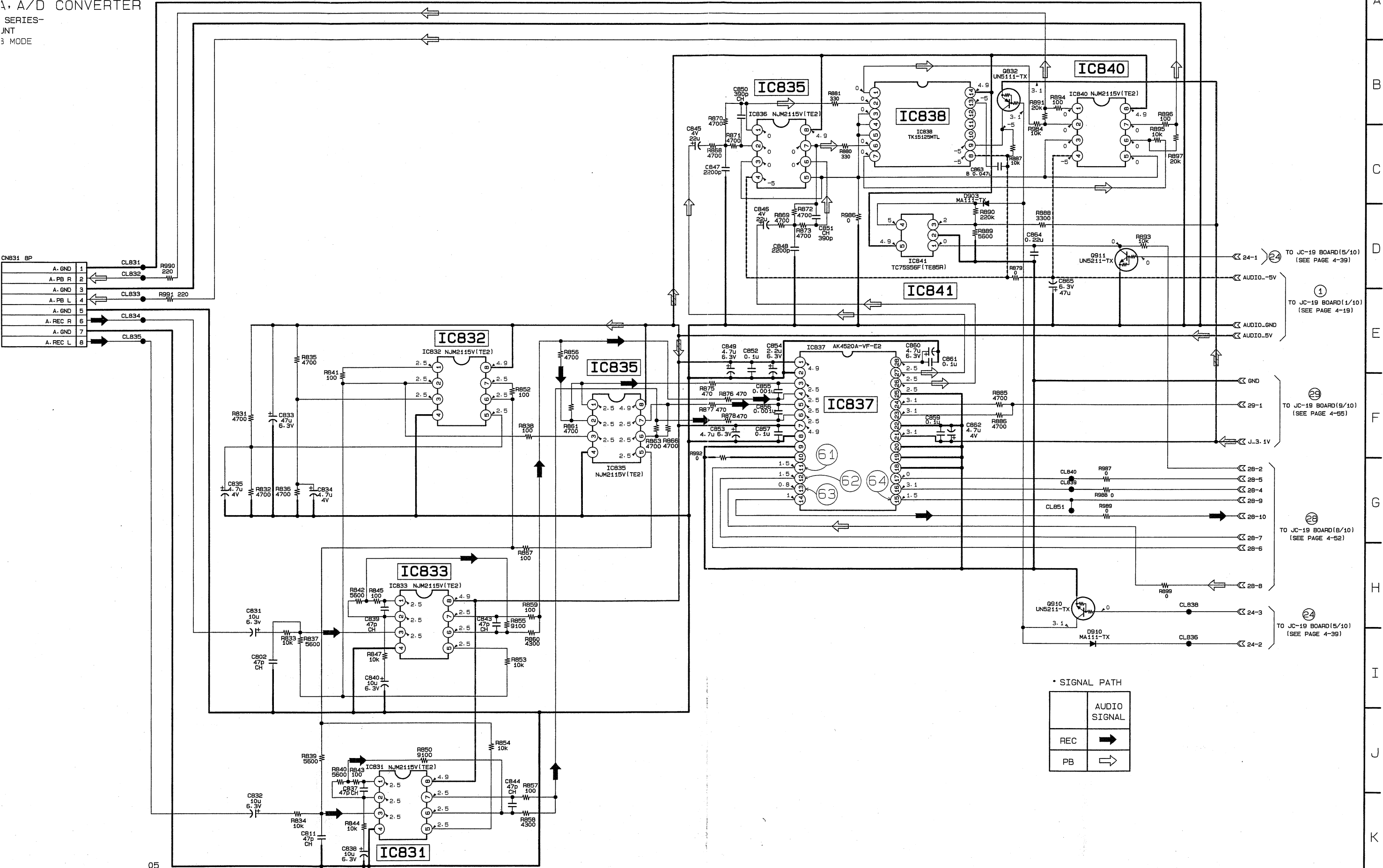
NO MARK: REC/PB MODE



**4-59**

BOARD (10/10)

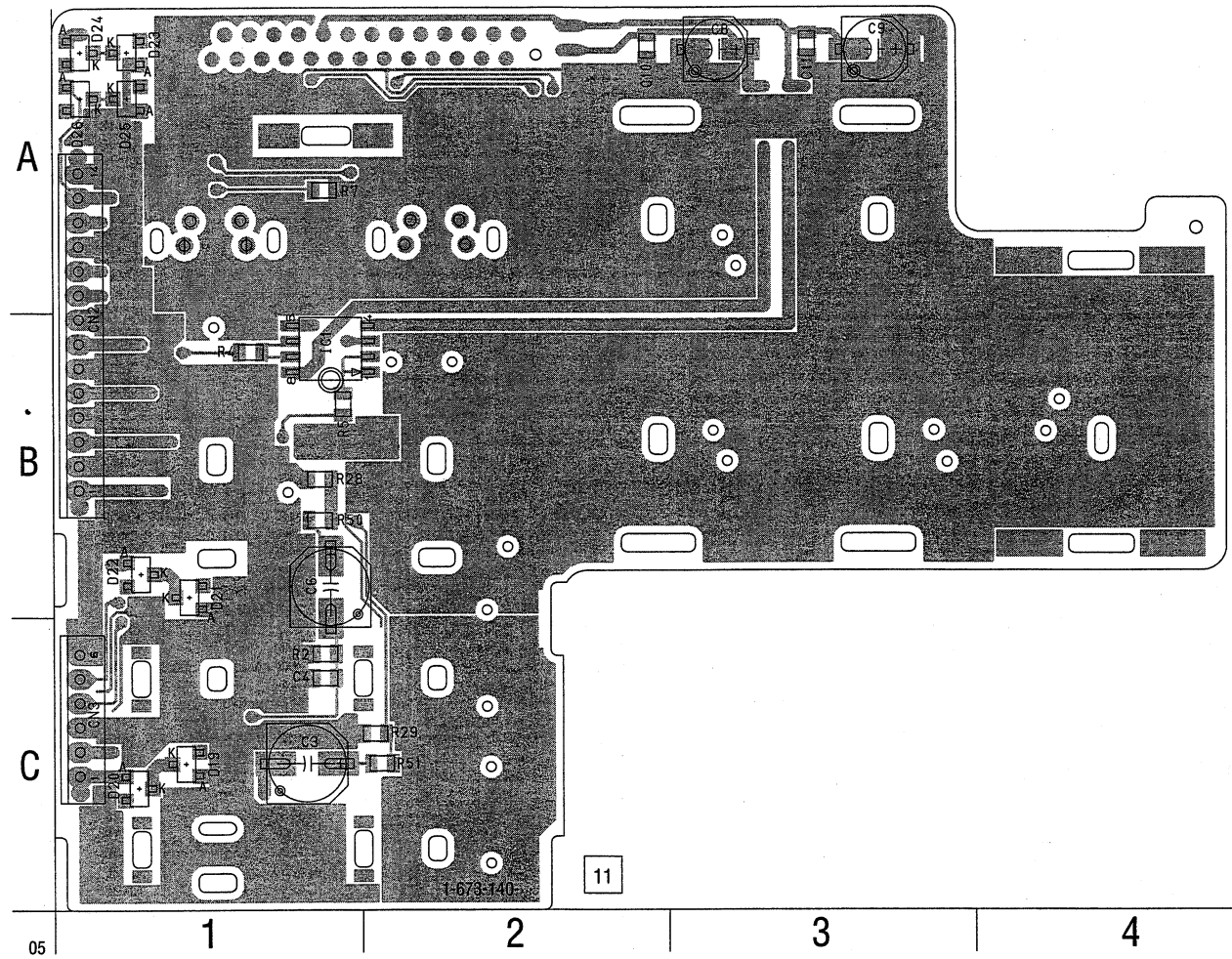
A, A/D CONVERTER  
SERIES-  
JNT  
3 MODE



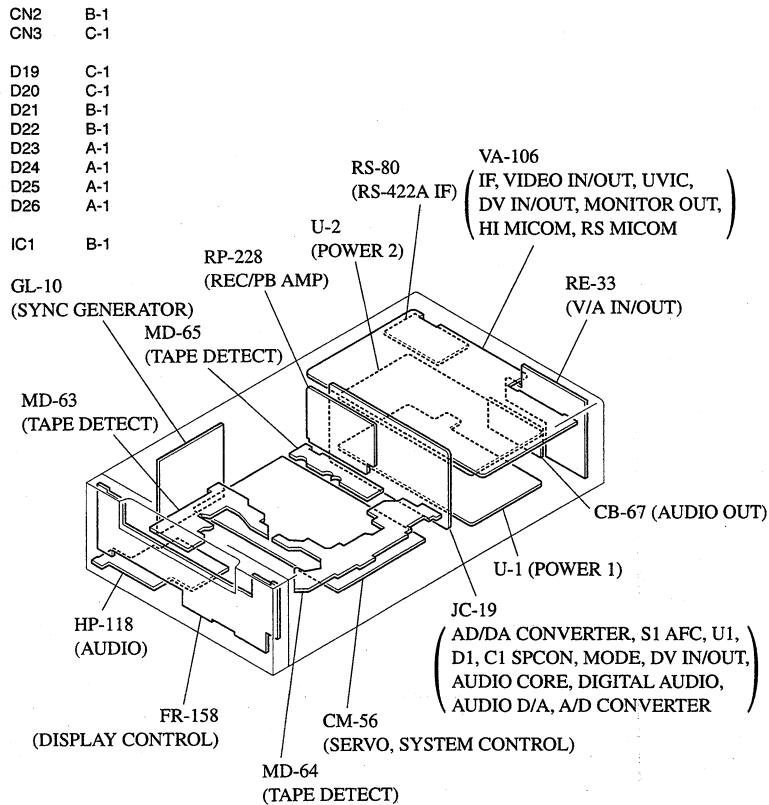
RE-33 (V/A IN/OUT), CB-67 (AUDIO OUT) PRINTED WIRING BOARDS AND SCHEMATIC DIAGRAM  
- Ref. No.: RE-33 board; 6,000/CB-67 board; 6,000 series -

- For Printed Wiring Board.
- There are cases that the part isn't mounted in this model is printed on this diagram.

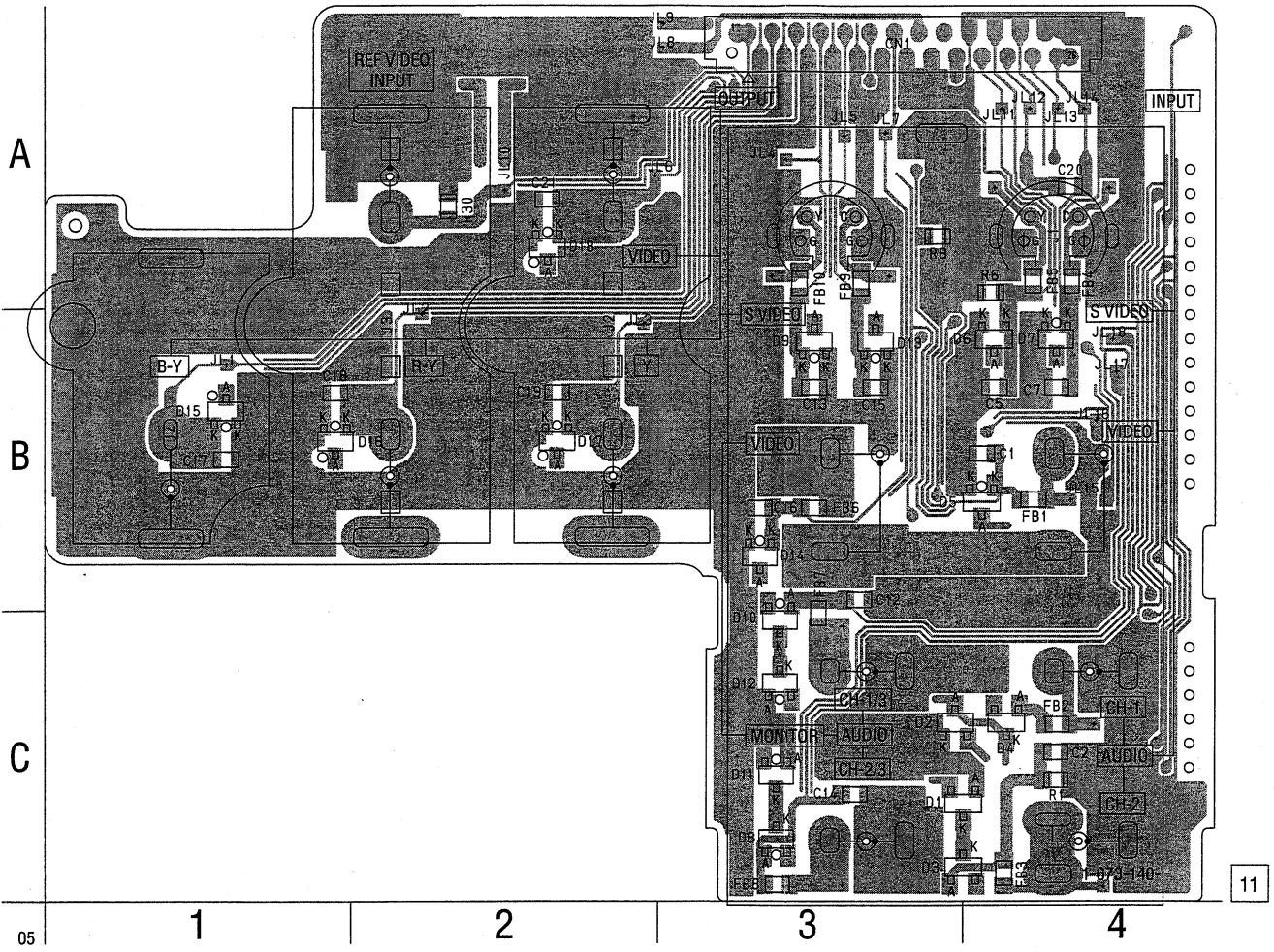
RE-33 BOARD (SIDE A)



RE-33 BOARD (SIDE A)



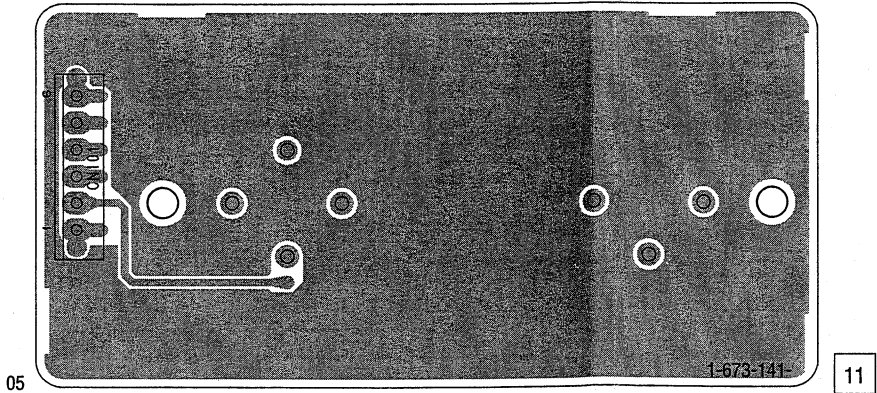
RE-33 BOARD (SIDE B)



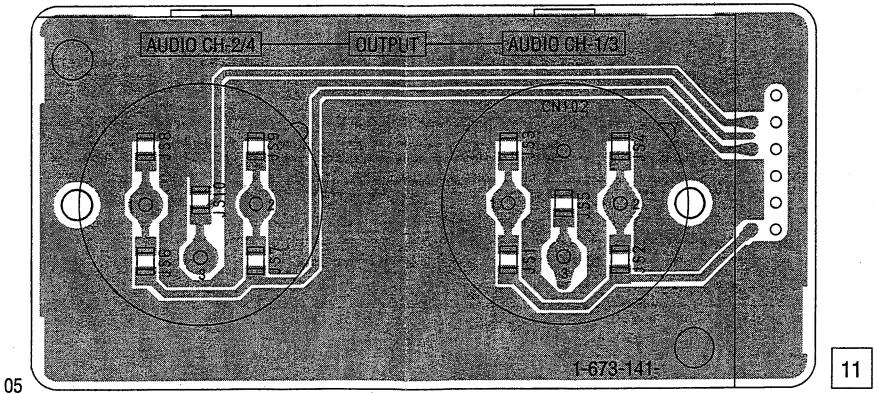
RE-33 BOARD (SIDE B)

- CN1 A-3
- D1 C-3
- D2 C-3
- D3 C-3
- D4 C-4
- D5 B-4
- D6 B-4
- D7 B-4
- D8 C-3
- D9 B-3
- D10 C-3
- D11 C-3
- D12 C-3
- D13 B-3
- D14 B-3
- D15 B-1
- D16 B-1
- D17 B-2
- D18 A-2

CB-67 BOARD (SIDE A)



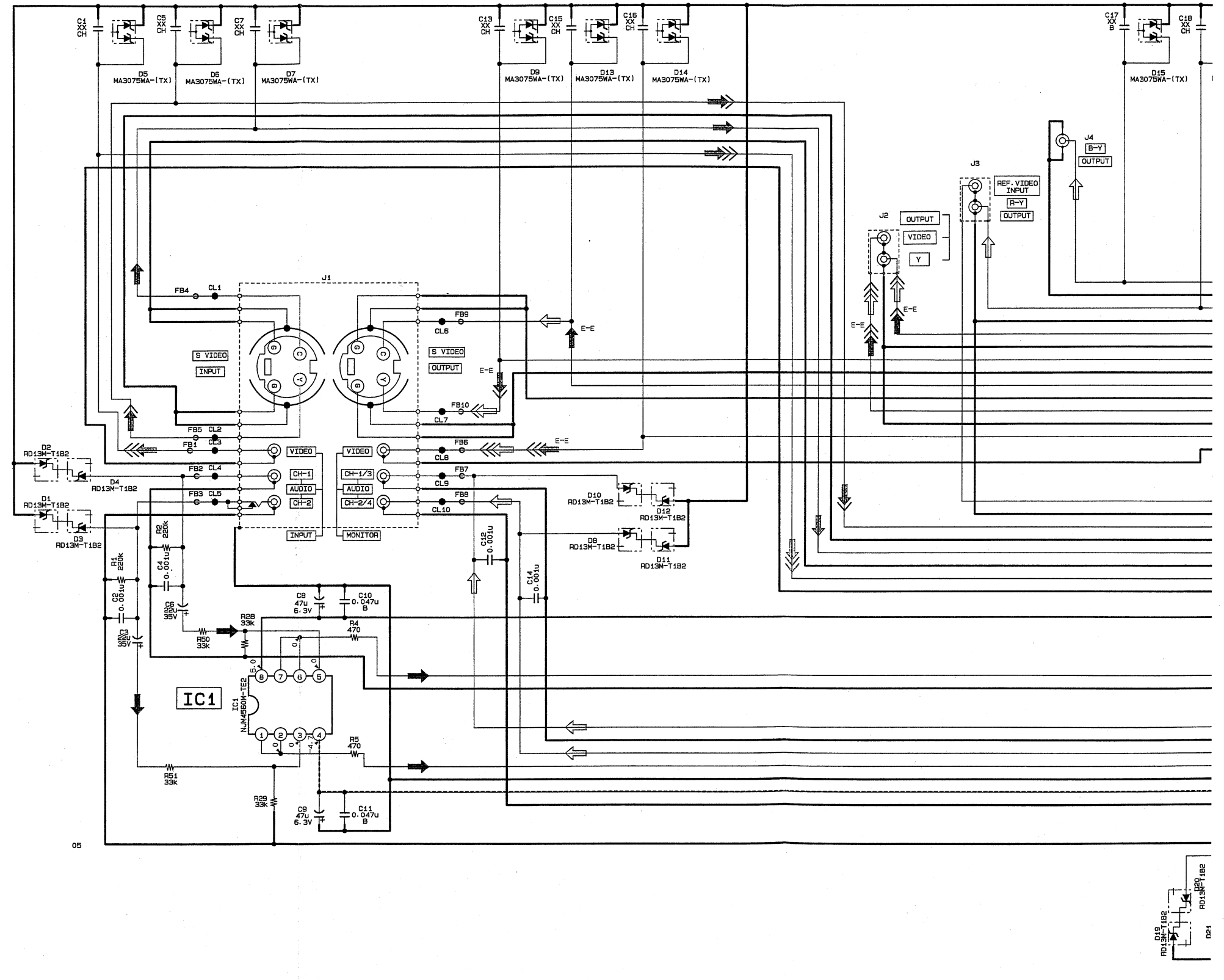
CB-67 BOARD (SIDE B)











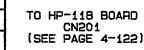


CN1	A-3
D1	C-3
D2	C-3
D3	C-3
D4	C-4
D5	B-4
D6	B-4
D7	B-4
D8	C-3
D9	B-3
D10	C-3
D11	C-3
D12	C-3
D13	B-3
D14	B-3
D15	B-1
D16	B-1
D17	B-2
D18	A-2

V/A IN/OUT  
-REF.NO.:6.000 SERIES-  
XX MARK:NO MOUNT  
NO MARK:REC/PB MODE



	VIDEO SIGNAL			AUDIO SIGNAL
	CHROMA	Y	Y/CHROMA	
REC				
PB				



CB-67



VA-106 (IF, VIDEO IN/OUT, UVIC, DV IN/OUT, MONITOR OUT, HI MICOM, RS MICOM) PRINTED WIRING BOARD

– Ref. No.: VA-106 board; 10,000 series –

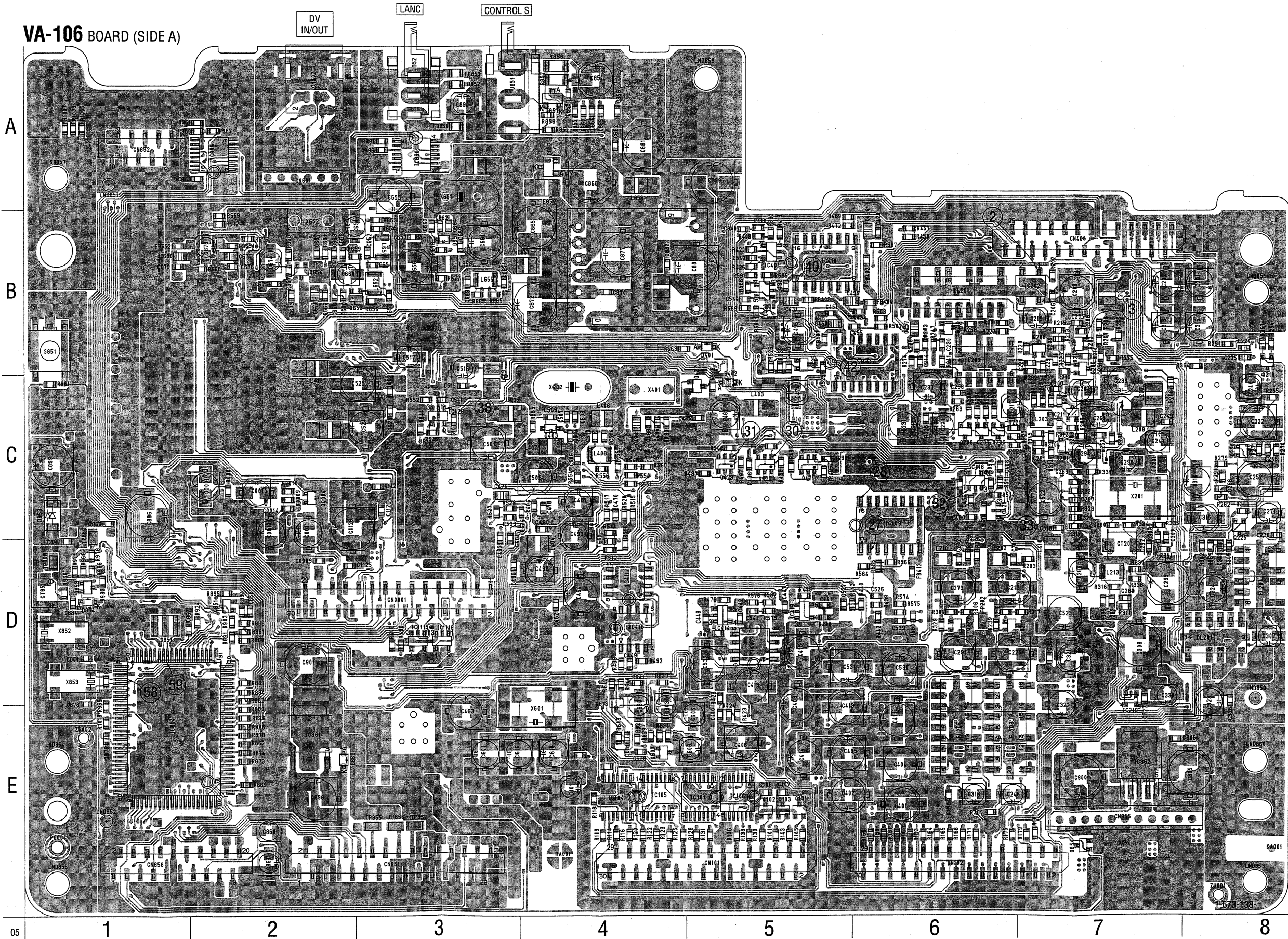
VA-106 BOARD (SIDE A)

- CN0001 D-3
- CN101 E-5
- CN102 E-6
- CN401 B-7
- CN601 A-2
- CN602 A-2
- CN851 E-3
- CN852 A-1
- CN855 E-7
- CN856 E-1

- D201 C-7
- D401 B-5
- D402 B-5
- D403 C-4
- D651 B-3
- D851 A-4
- D852 A-4
- D854 D-1
- D858 C-1
- D860 E-2

- IC101 E-5
- IC104 E-4
- IC105 E-4
- IC106 E-5
- IC202 B-7
- IC219 D-7
- IC401 B-5
- IC409 C-6
- IC410 B-5
- IC411 D-4
- IC413 D-5
- IC414 D-5
- IC416 D-4
- IC417 B-6
- IC418 C-6
- IC421 C-6
- IC426 C-3
- IC429 D-5
- IC430 B-5
- IC854 E-1
- IC855 A-2
- IC857 B-4
- IC860 A-3
- IC861 E-2
- IC862 E-7
- IC1115 D-3
- IC1116 D-3

- Q0004 C-2
- Q101 E-5
- Q102 E-5
- Q103 E-5
- Q202 C-7
- Q203 B-7
- Q205 B-7
- Q206 C-6
- Q207 C-6
- Q208 B-7
- Q209 C-6
- Q211 D-6
- Q215 B-6
- Q218 B-8
- Q220 C-8
- Q225 C-8
- Q228 D-6
- Q421 C-5
- Q422 C-5
- Q423 C-5
- Q425 B-5
- Q427 B-5
- Q607 E-4
- Q613 D-4
- Q653 B-2
- Q654 B-2
- Q851 D-2
- Q853 D-1
- Q854 E-7



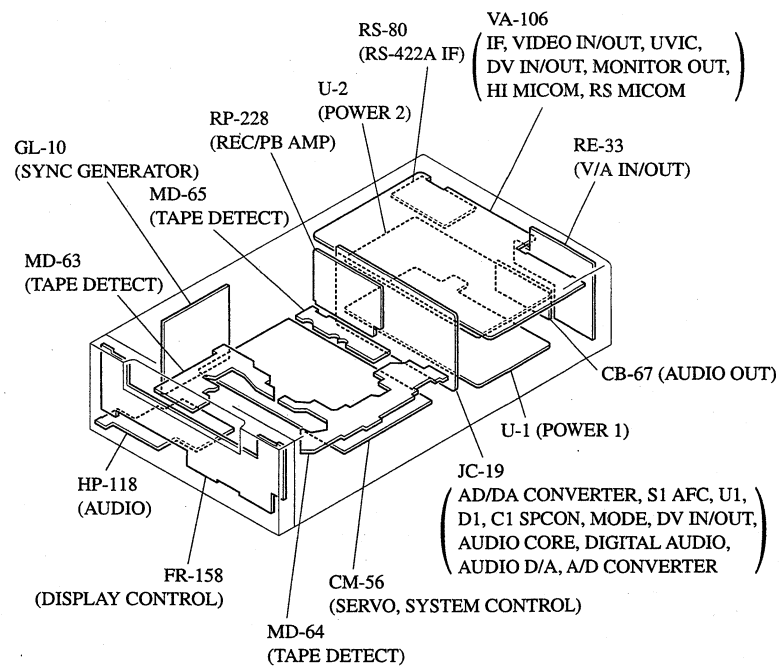
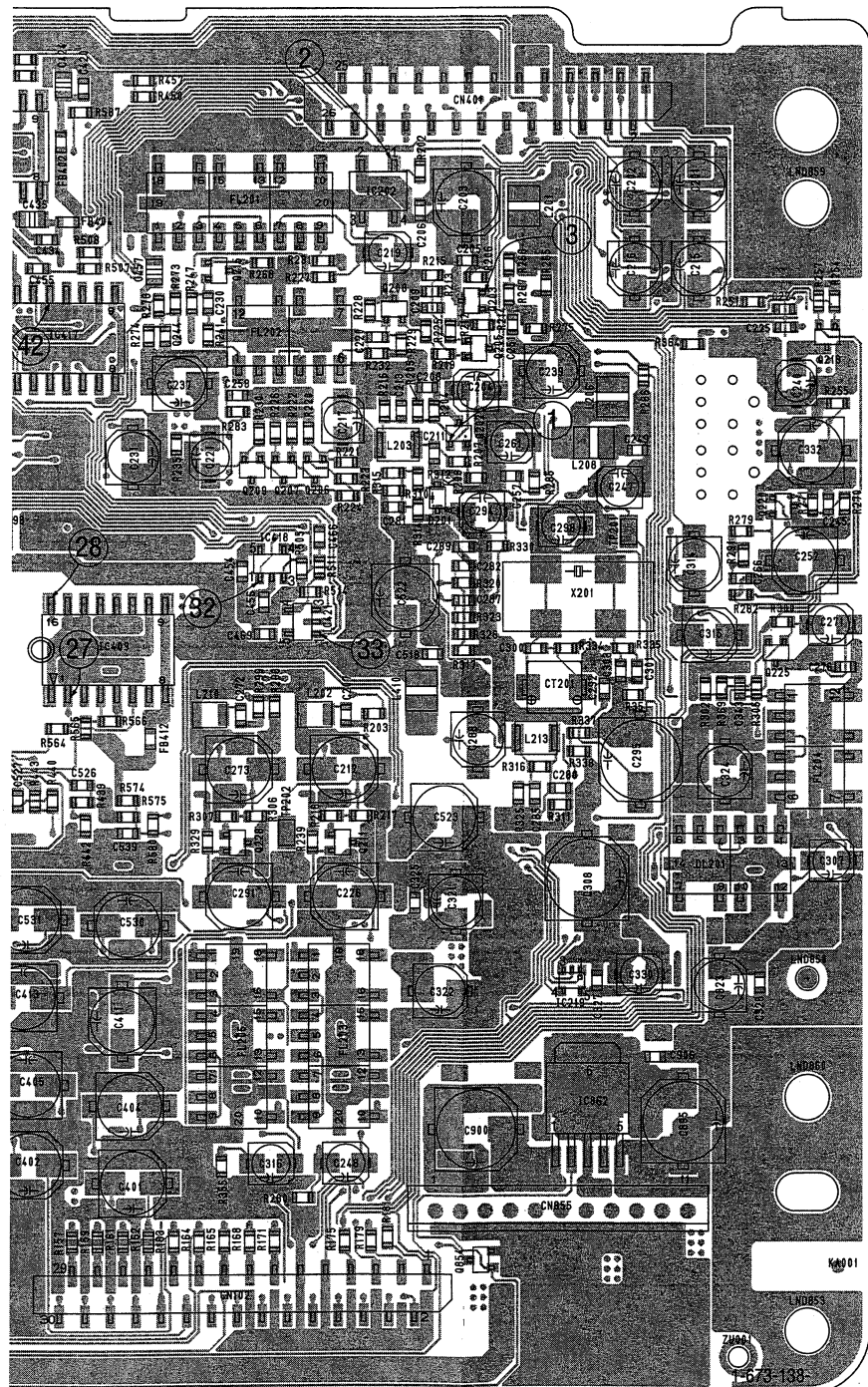
GL-10  
(SYNC GENERA

MD-63  
(TAPE DETECT

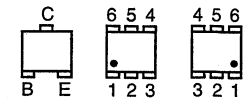
HP-118  
(AUDIO)

(DISPLAY CO

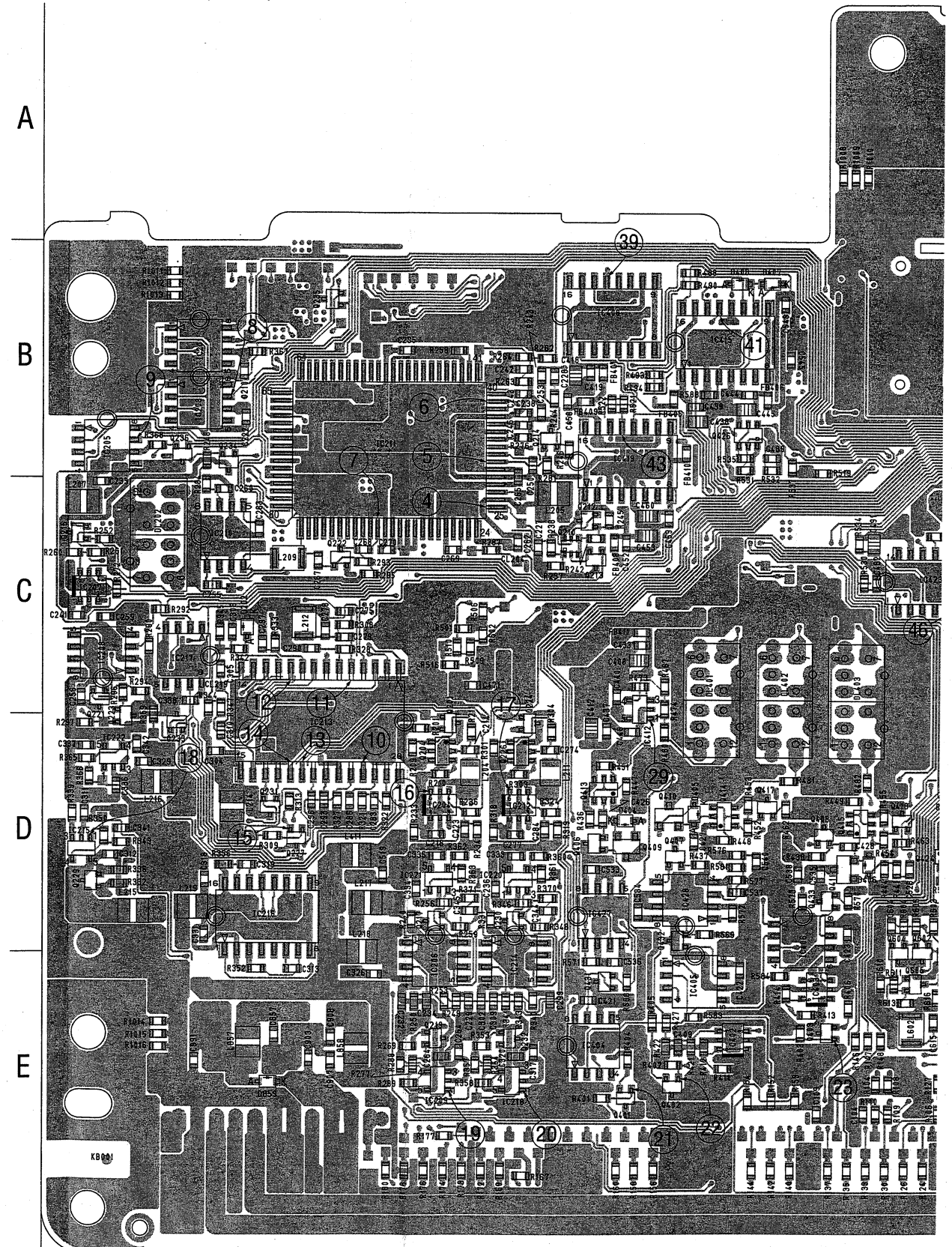




- For Printed Wiring Board.
- VA-106 board is 4-layer print board. However, the patterns of layers 2 to 3 have not been included in the diagram.
- There are few cases that the part isn't mounted in this model is printed on this diagram.
- Chip transistor

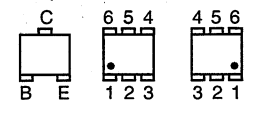


VA-106 BOARD (SIDE B)

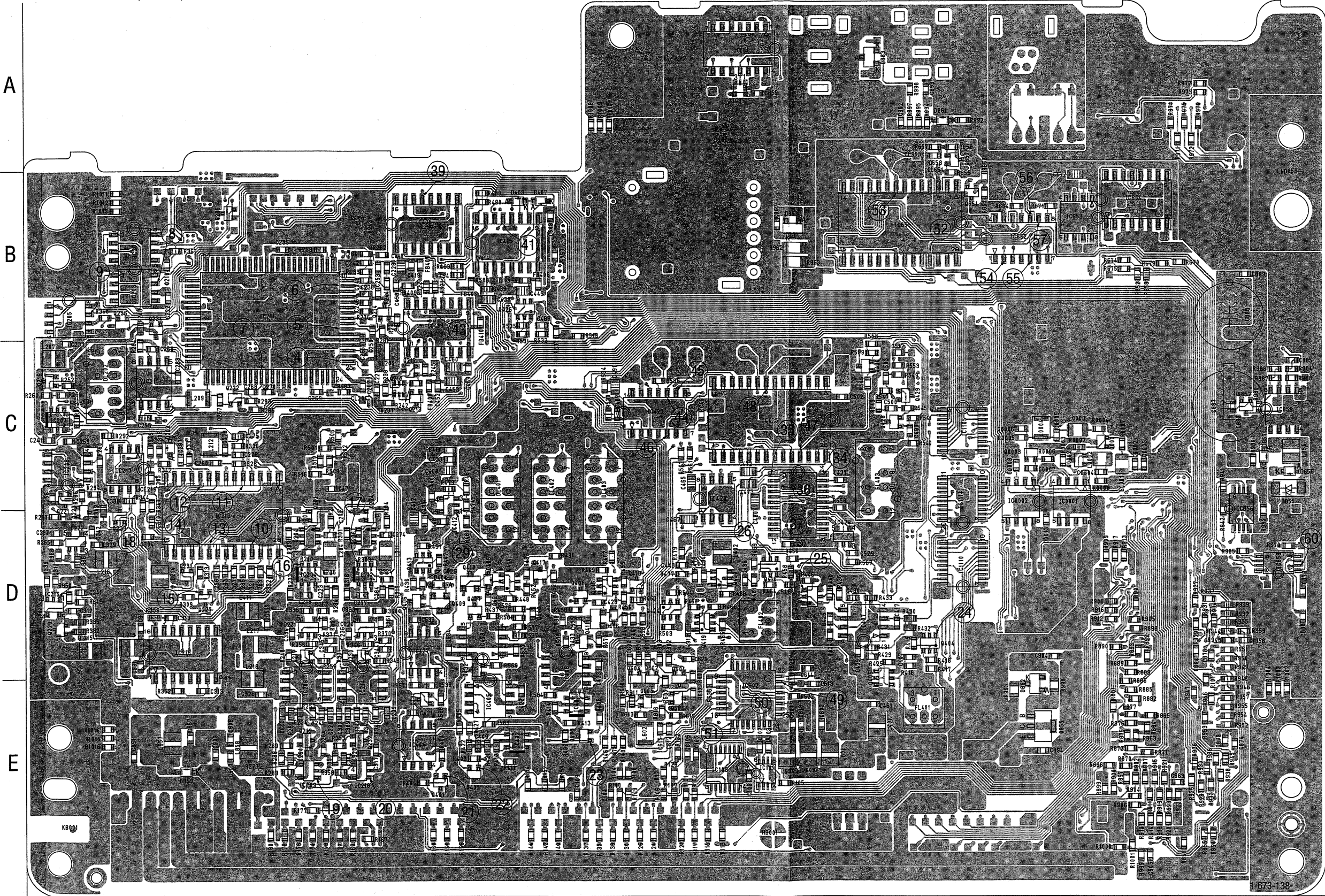




- For Printed Wiring Board.
- VA-106 board is 4-layer print board. However, the patterns of layers 2 to 3 have not been included in the diagram.
- There are few cases that the part isn't mounted in this model is printed on this diagram.
- Chip transistor



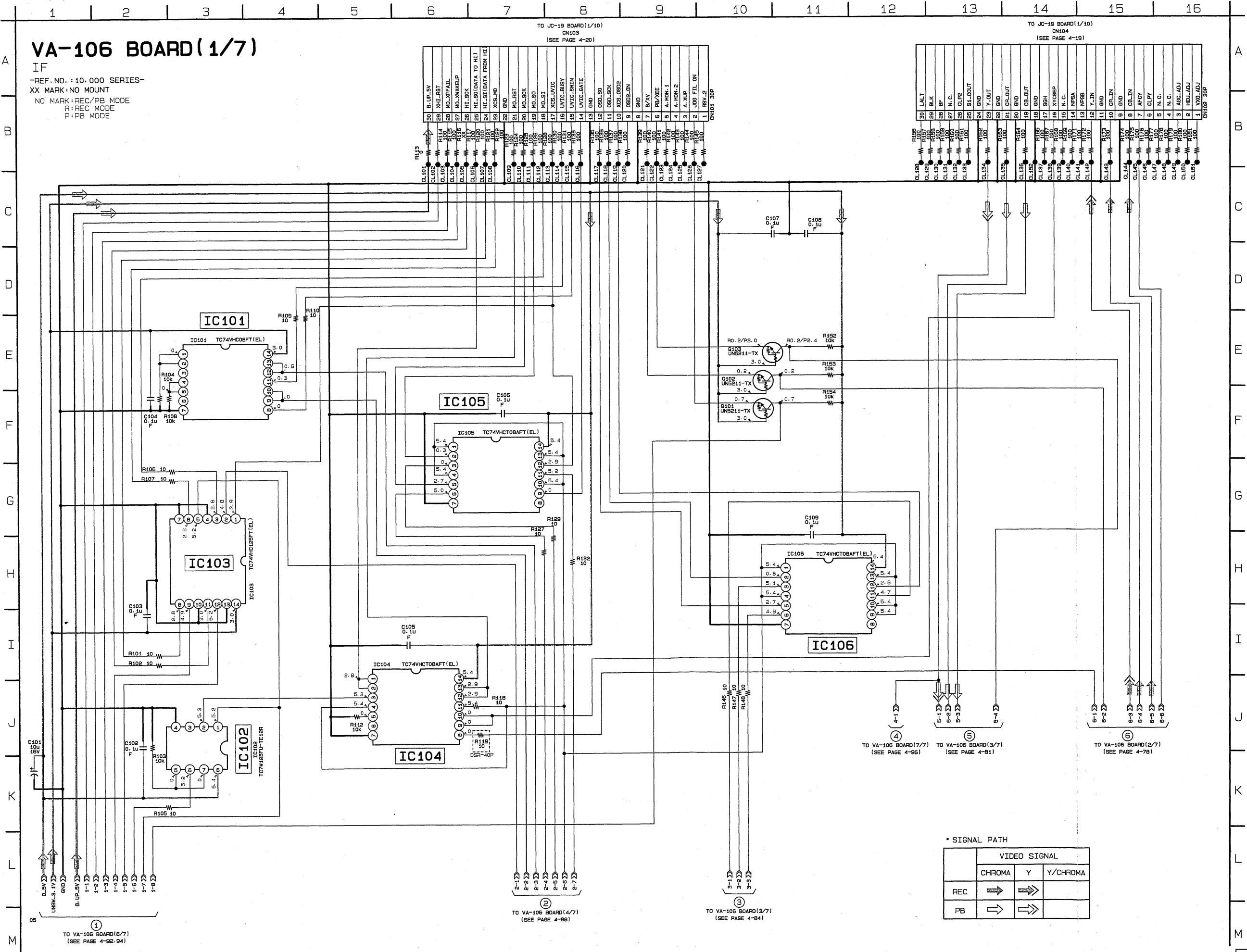
VA-106 BOARD (SIDE B)



VA-106 BOARD (SIDE B)

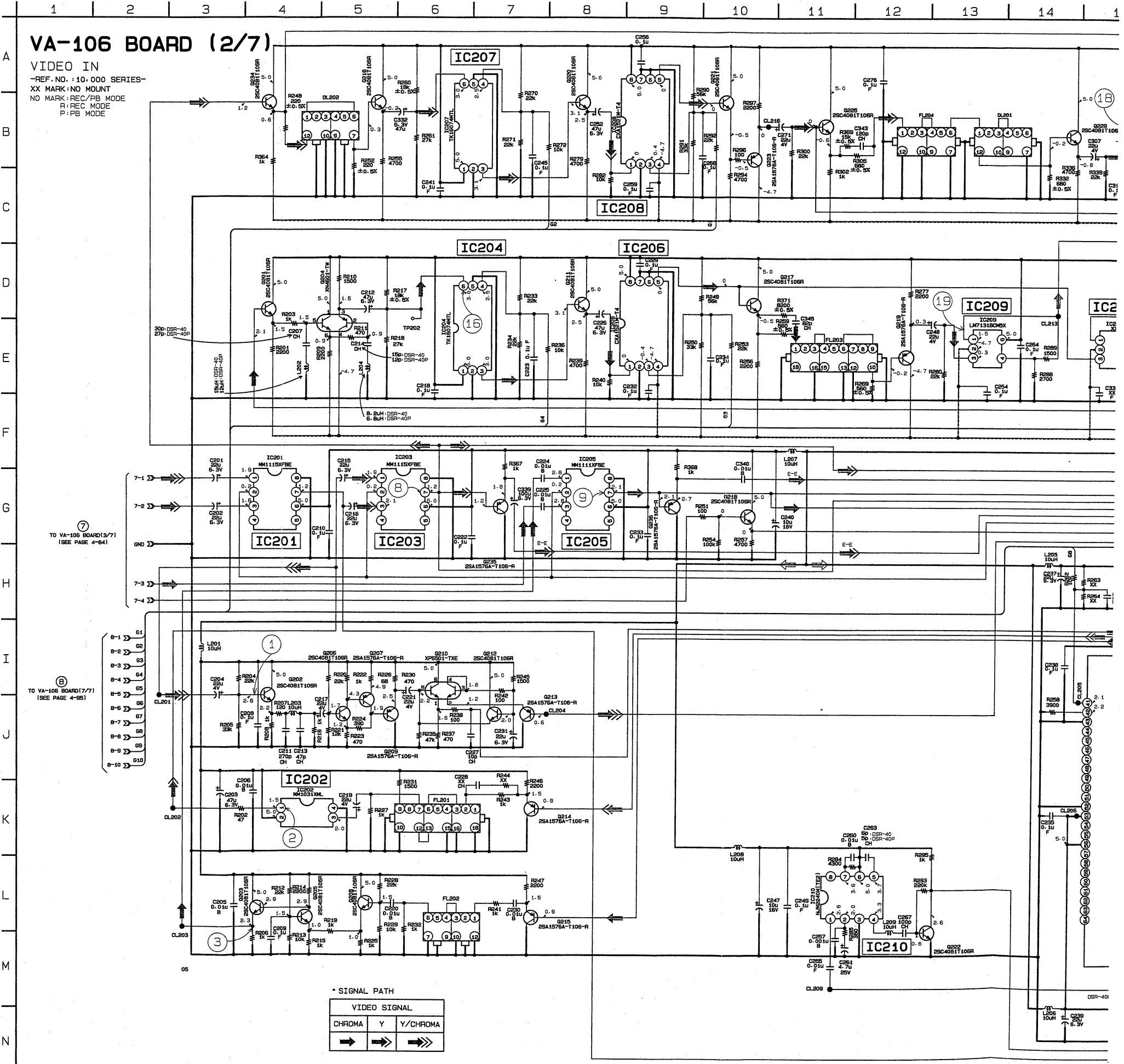
D202	C-1	IC1110	D-6
D404	D-3	IC1114	C-6
D405	D-3		
D406	D-4	Q0001	C-7
D407	B-4	Q0002	C-7
D408	B-3	Q0003	C-6
D855	C-8	Q201	C-2
D856	C-8	Q204	D-2
D857	C-8	Q210	C-3
D859	E-1	Q212	C-3
D862	E-6	Q213	C-3
D863	A-5	Q214	B-3
		Q216	C-1
IC0001	C-7	Q217	D-2
IC0002	C-6	Q219	E-2
IC102	E-5	Q221	C-1
IC103	E-5	Q222	C-2
IC201	B-1	Q223	D-1
IC203	B-1	Q224	D-3
IC204	D-2	Q226	D-3
IC205	B-1	Q227	D-2
IC206	E-2	Q229	D-1
IC207	C-1	Q230	D-3
IC208	C-1	Q231	D-1
IC209	E-2	Q232	E-2
IC210	C-1	Q233	D-1
IC211	B-2	Q234	B-1
IC212	D-2	Q235	B-2
IC213	D-2	Q236	B-1
IC 214	E-2	Q401	E-3
IC215	D-1	Q402	E-3
IC216	D-1	Q403	E-4
IC217	C-1	Q404	D-6
IC218	E-2	Q405	D-6
IC220	D-2	Q406	D-3
IC221	D-2	Q407	D-3
IC222	D-1	Q408	D-4
IC402	E-3	Q409	D-3
IC403	E-4	Q410	D-3
IC404	E-3	Q411	D-4
IC405	E-3	Q412	D-5
IC406	D-4	Q413	D-3
IC407	D-5	Q414	D-3
IC408	B-3	Q415	D-4
IC412	D-3	Q416	D-5
IC415	B-3	Q417	D-4
IC419	B-3	Q418	D-4
IC420	C-5	Q419	D-4
IC422	C-5	Q420	D-5
IC423	C-4	Q426	B-3
IC424	D-5	Q428	C-6
IC425	C-5	Q429	C-6
IC427	D-3	Q430	C-5
IC428	D-3	Q431	E-3
IC602	E-5	Q432	D-3
IC651	B-6	Q433	D-4
IC652	B-6	Q601	D-4
IC653	B-7	Q602	D-4
IC654	B-7	Q604	D-4
IC851	A-5	Q605	E-4
IC853	A-5	Q606	E-4
IC856	C-8	Q651	B-6
IC858	D-8	Q652	A-6
IC859	C-8	Q852	C-8
IC1105	C-6	Q855	E-6

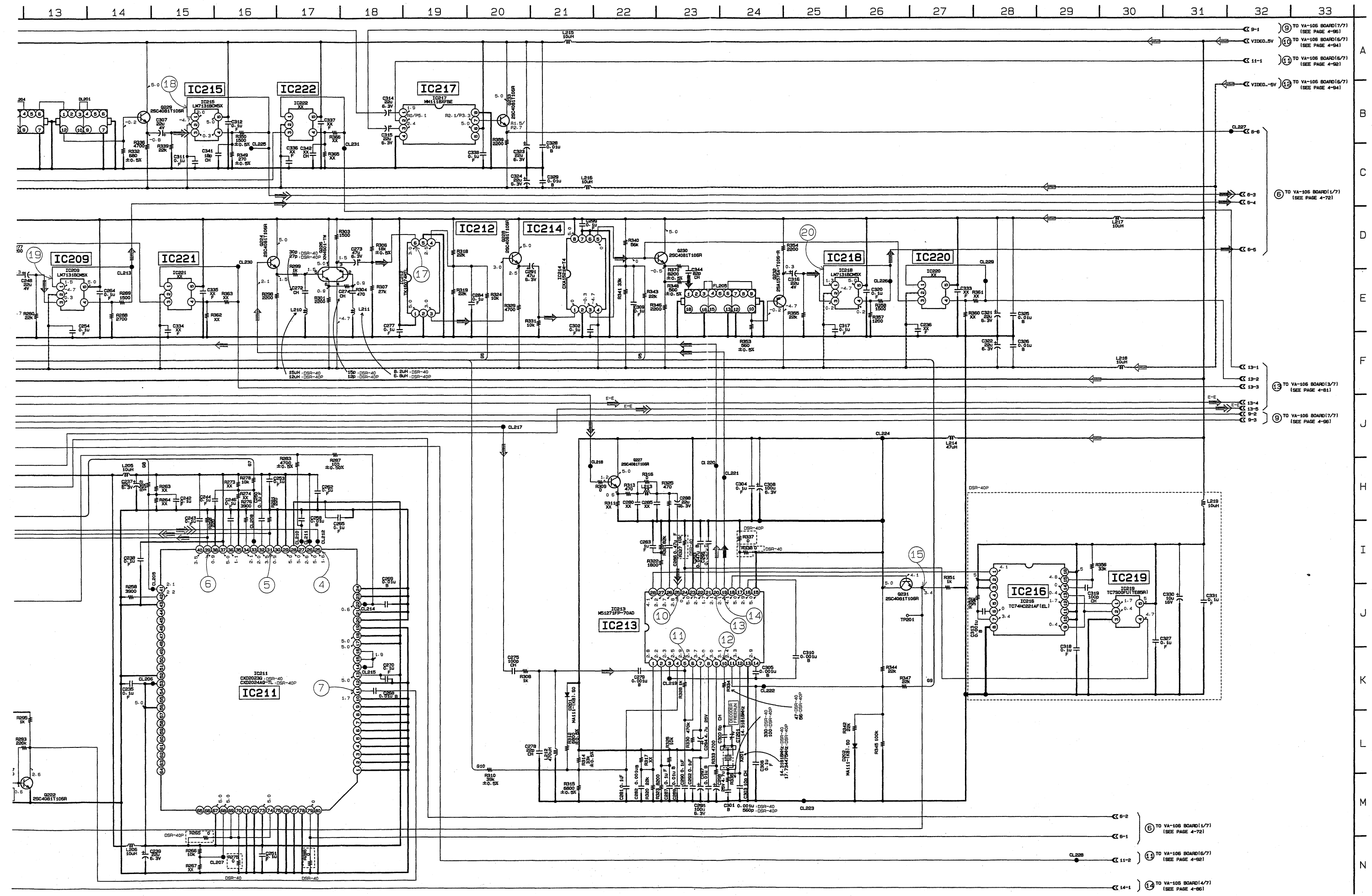
VA-106 (IF) SCHEMATIC DIAGRAM



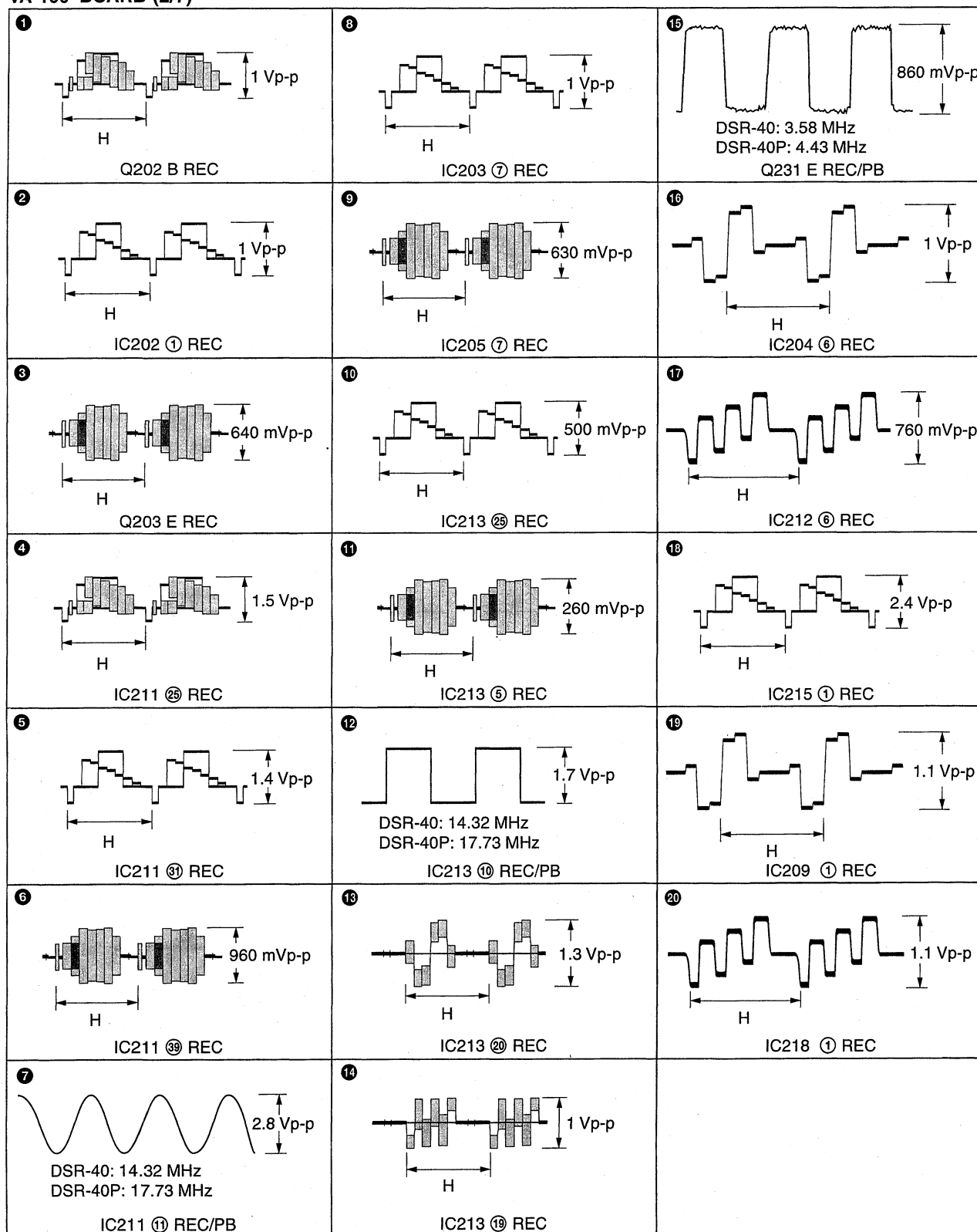


VA-106 (VIDEO IN) SCHEMATIC DIAGRAM • See page 4-66 for VA-106 printed wiring board.

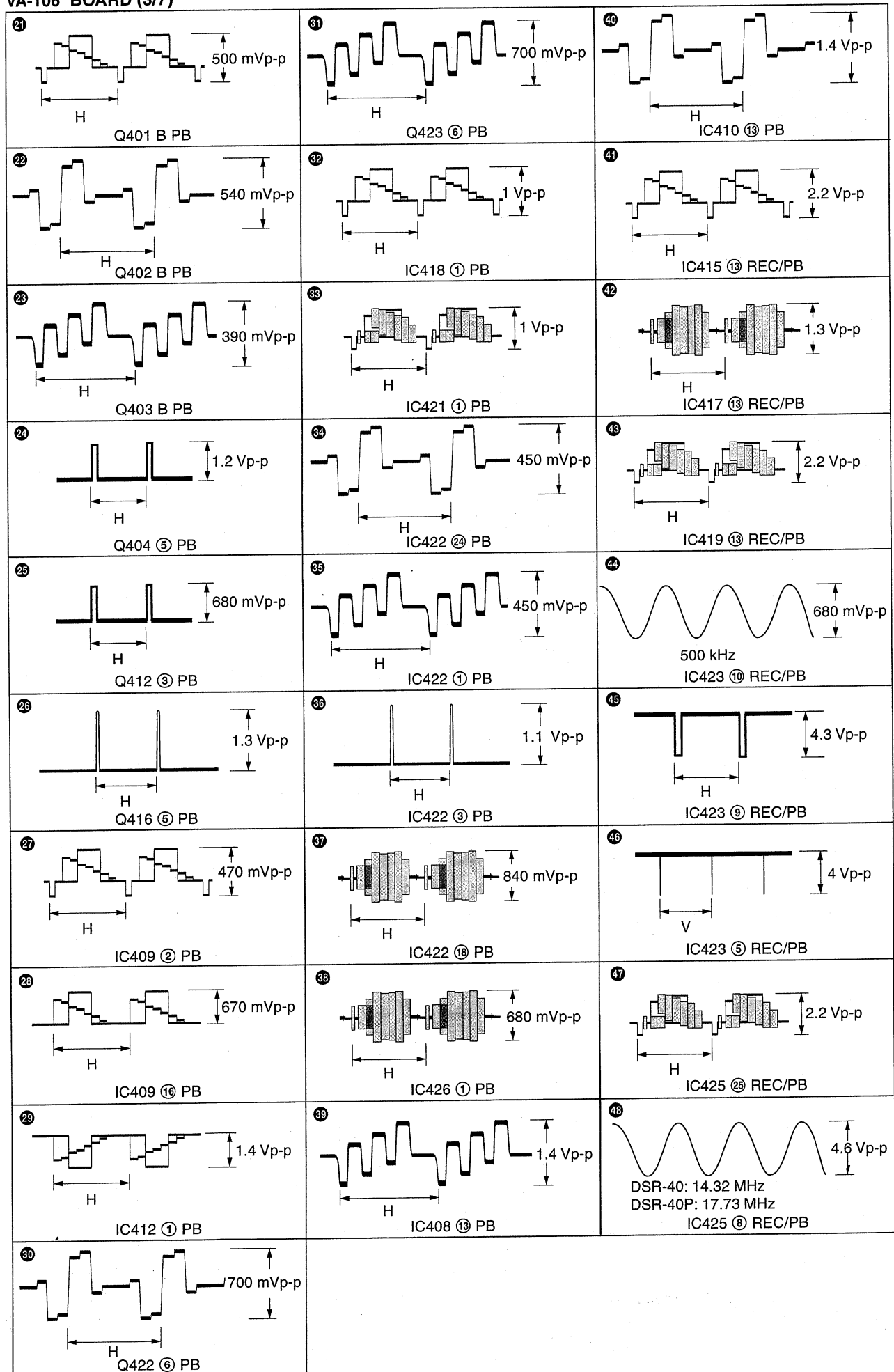




VA-106 BOARD (2/7)



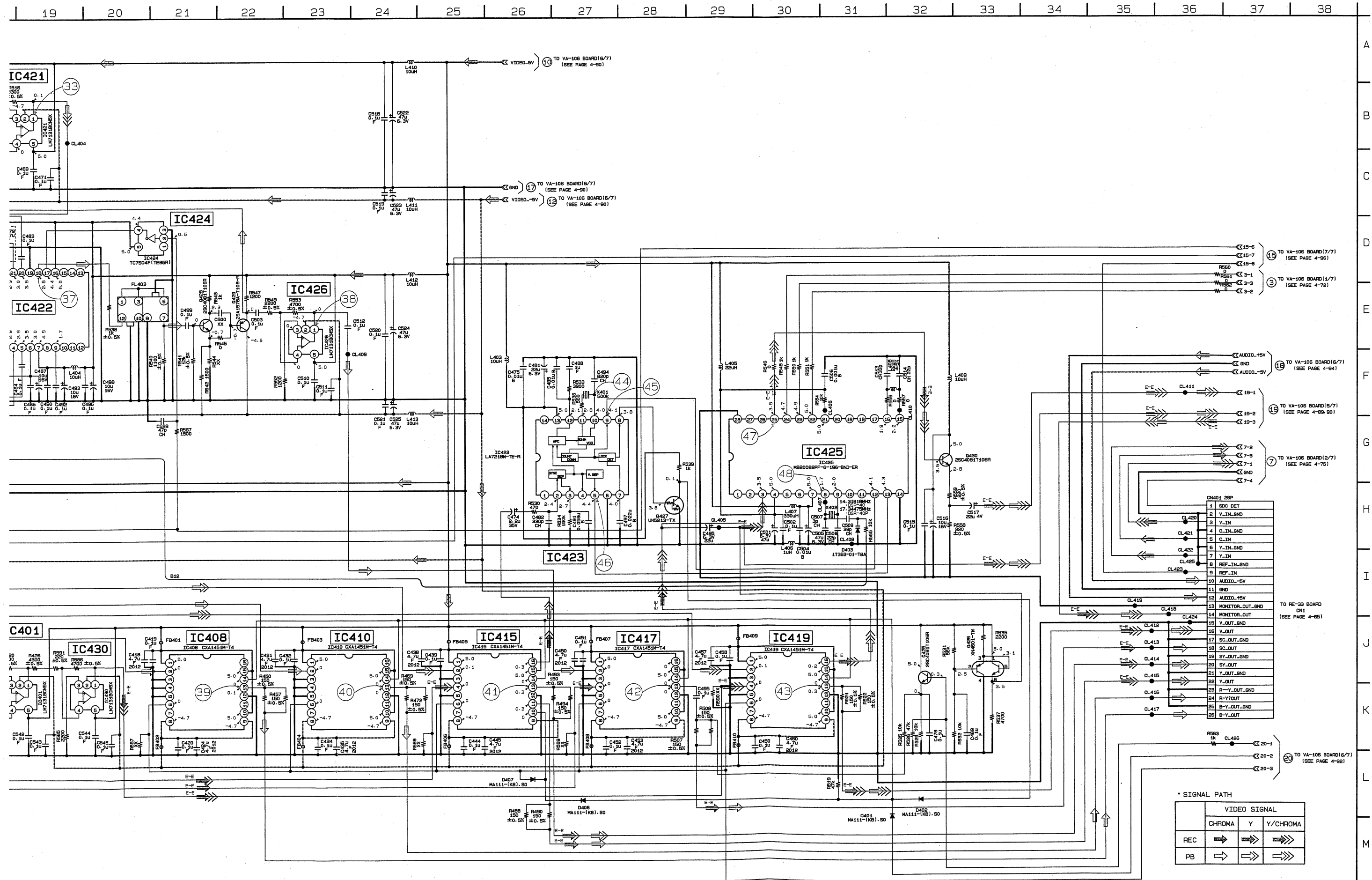
VA-106 BOARD (3/7)



A  
—  
B  
—  
C  
—  
D  
—  
E  
—  
F  
—  
G  
—  
H  
—  
I  
—  
J  
—  
K  
—  
L  
—  
M

TO VA-106 BOARD(7/7) (1E)  
(SEE PAGE 4-95)







**VA-106 (UVIC, DV IN/OUT) SCHEMATIC DIAGRAM • See page 4-66 for VA-106 printed wiring board.**

VA-106 BOARD (4/7)

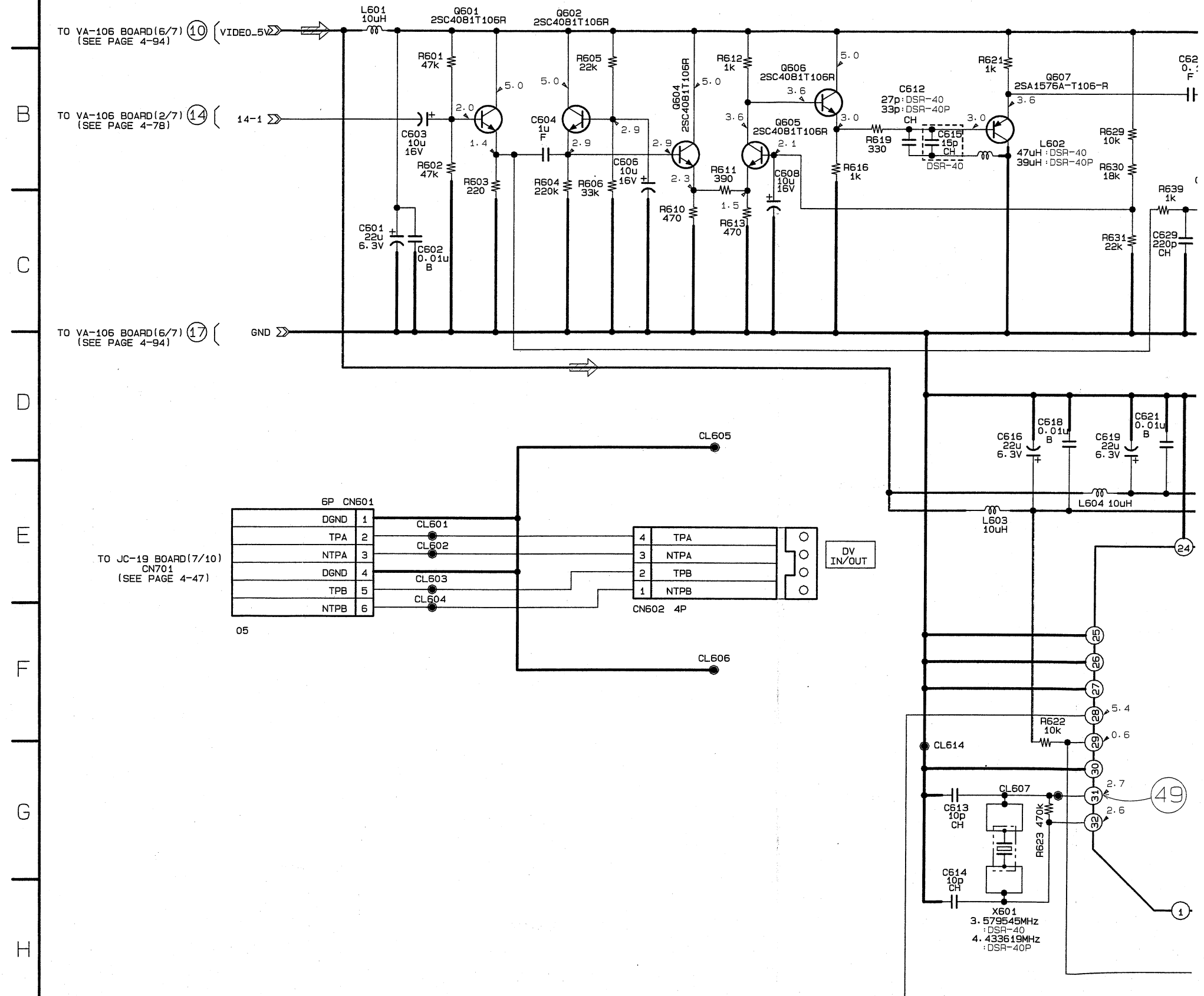
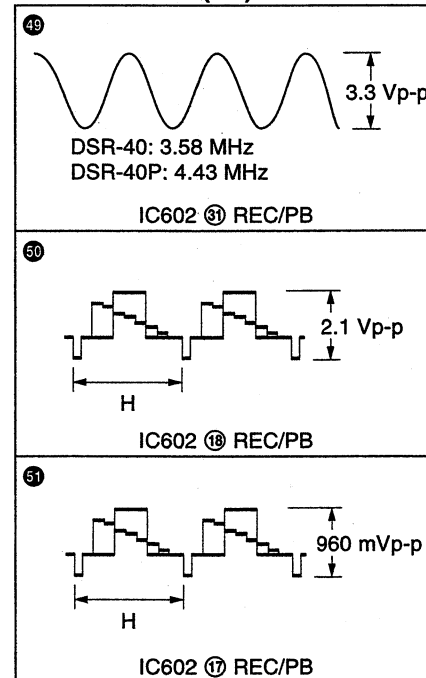
-REF. NO. : 10,000 SERIES-

XX MARK:NO MOUNT

NO MARK: REC/PB MODE

A	UVIC, DV IN/OUT
---	-----------------

**VA-106 BOARD (4/7)**

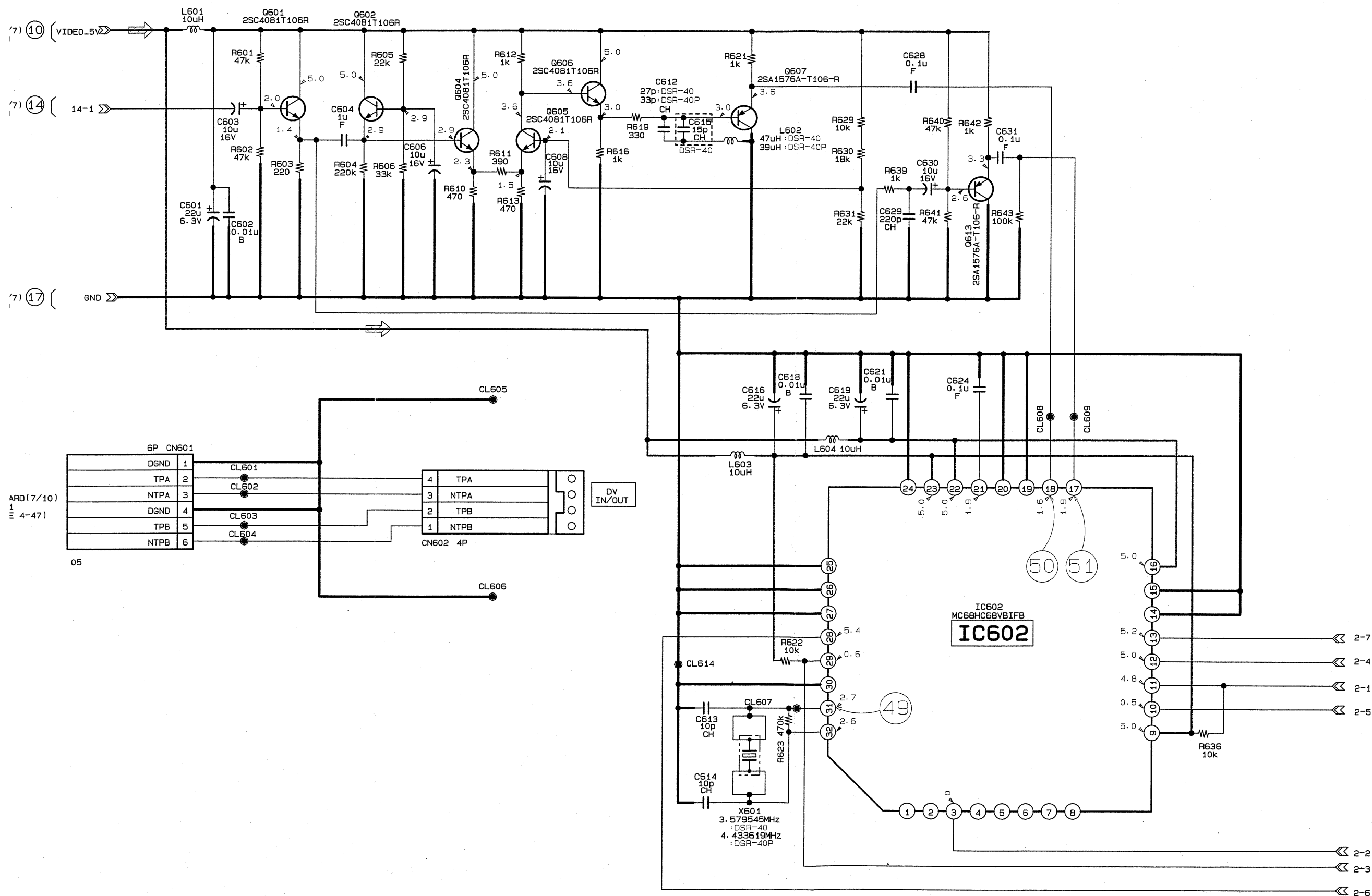


/OUT) SCHEMATIC DIAGRAM • See page 4-66 for VA-106 printed wiring board.

# 06 BOARD(4/7)

-REF.NO.:10.000 SERIES-  
XX MARK:NO MOUNT  
NO MARK:REC/PB MODE

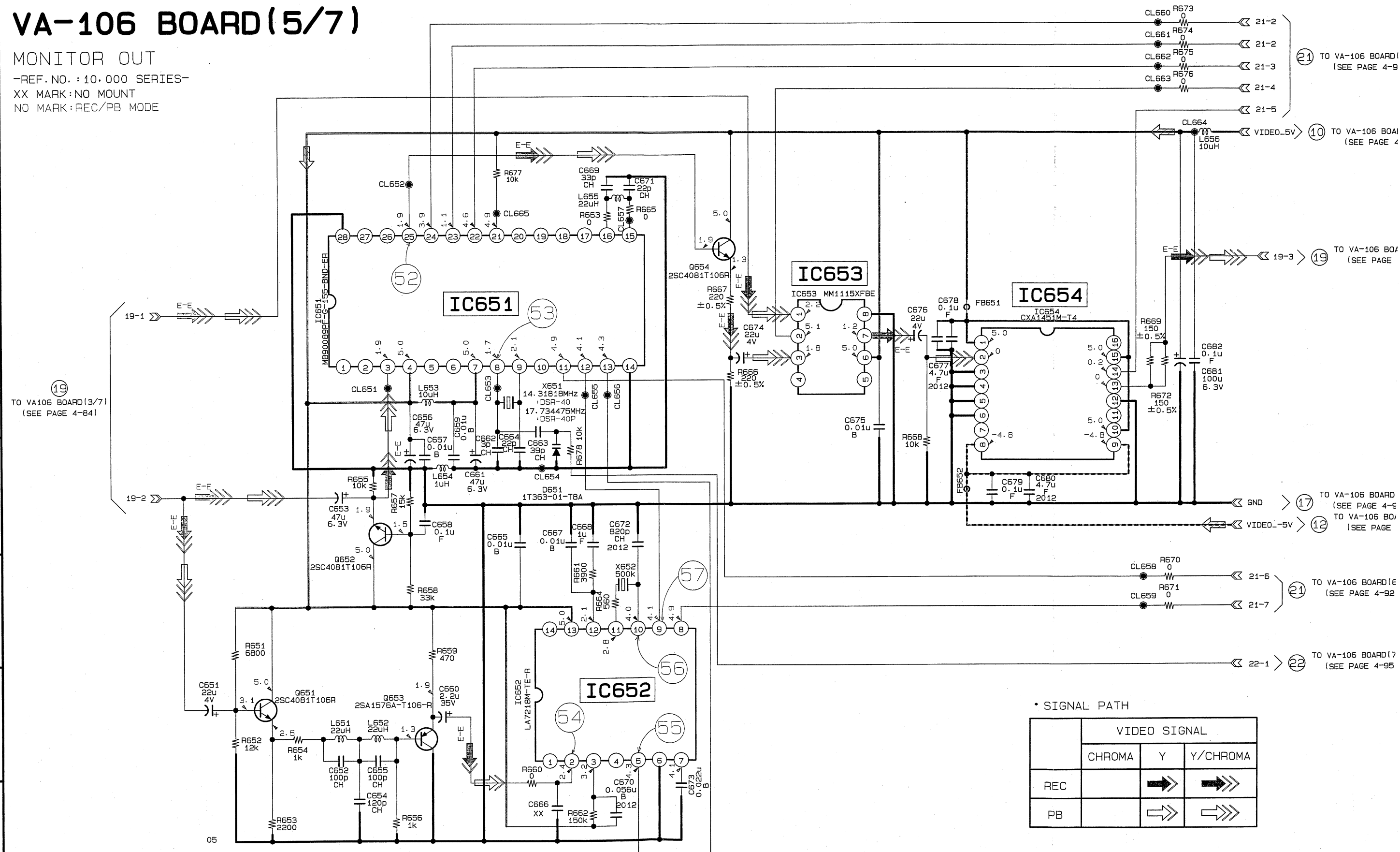
0V IN/OUT







②  
TO VA-106 BOARD(1/7)  
(SEE PAGE 4-71)

A  
—  
B  
—  
C  
—  
D  
—  
E  
—  
F  
—  
G  
—  
H

```
-REF. NO. : 10,000 SERIES-  
XX MARK:NO MOUNT  
NO MARK:REC/PB MODE
```



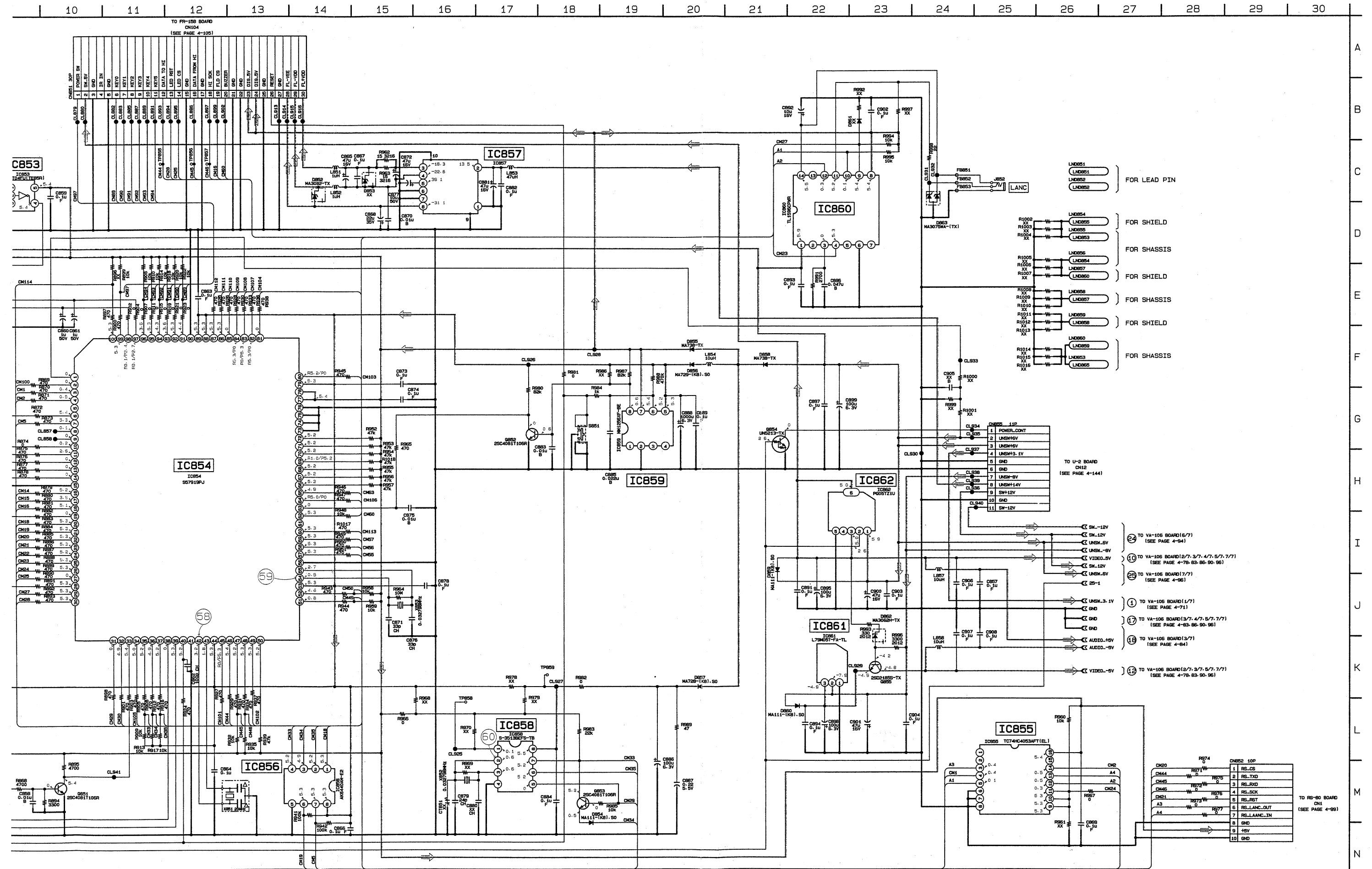
- SIGNAL PATH

	VIDEO SIGNAL		
	CHROMA	Y	Y/CHROMA
REC			
PB			



4-92

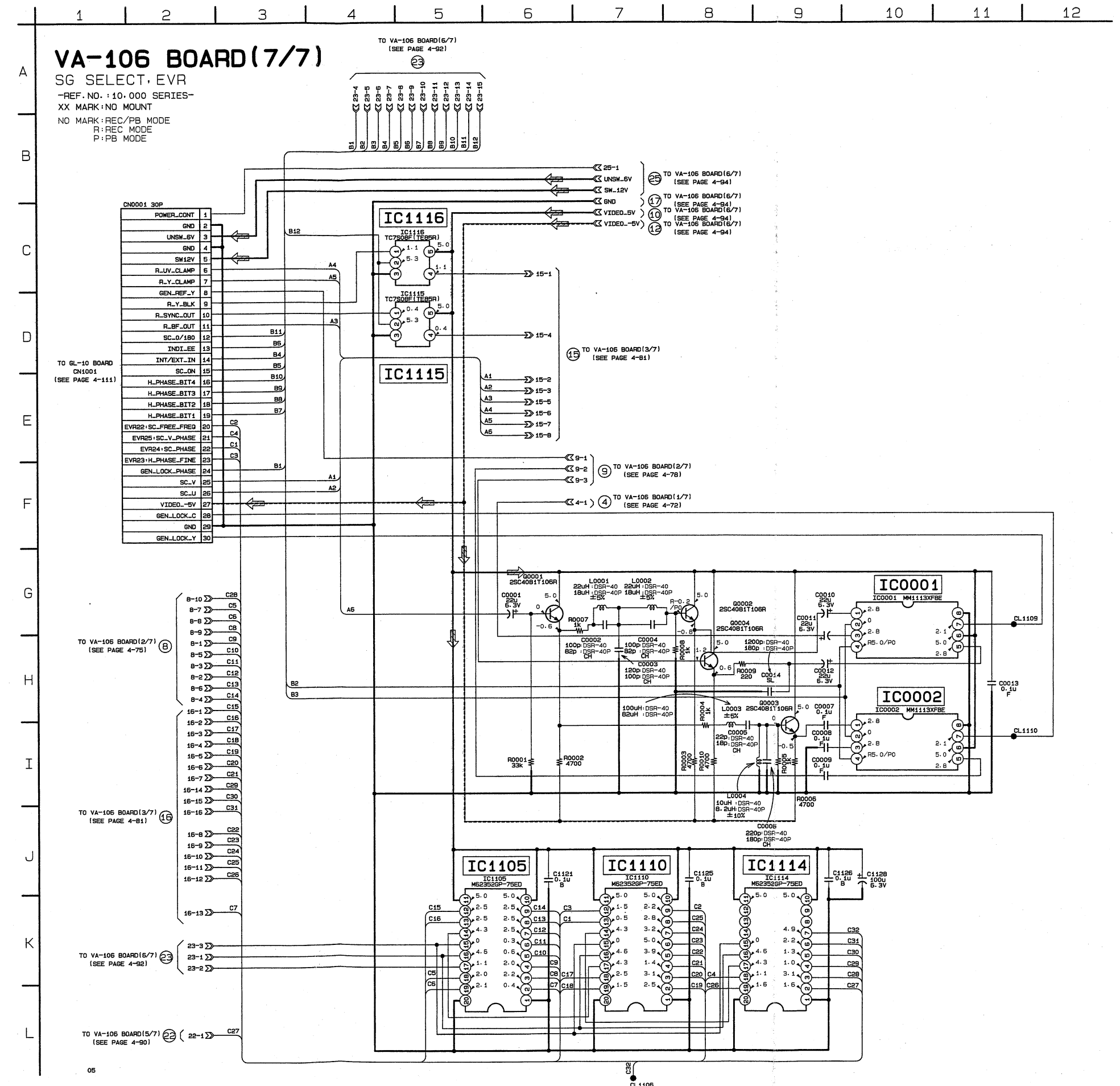
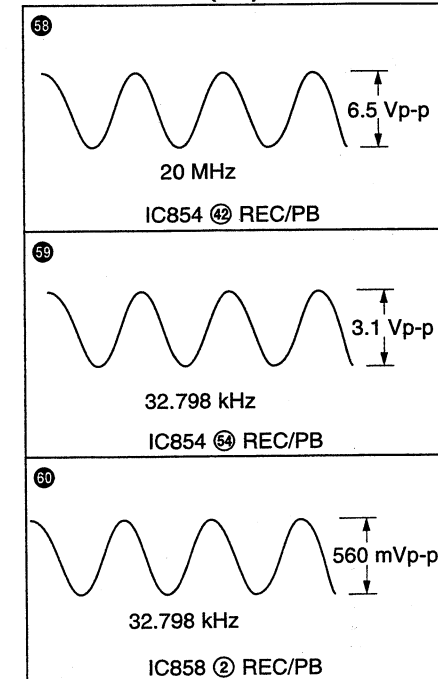






**VA-106 (SG SELECT, EVR) SCHEMATIC DIAGRAM • See page 4-66 for VA-106 printed wiring board.**

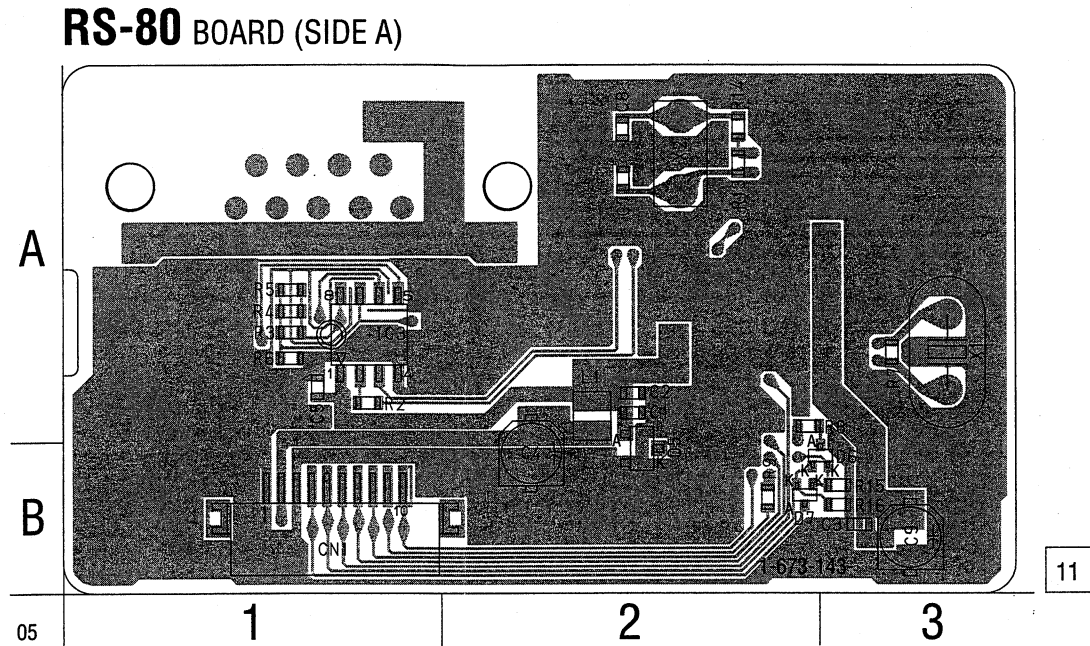
**VA-106 BOARD (6/7)**



RS-80 (RS-422A IF) PRINTED WIRING BOARD

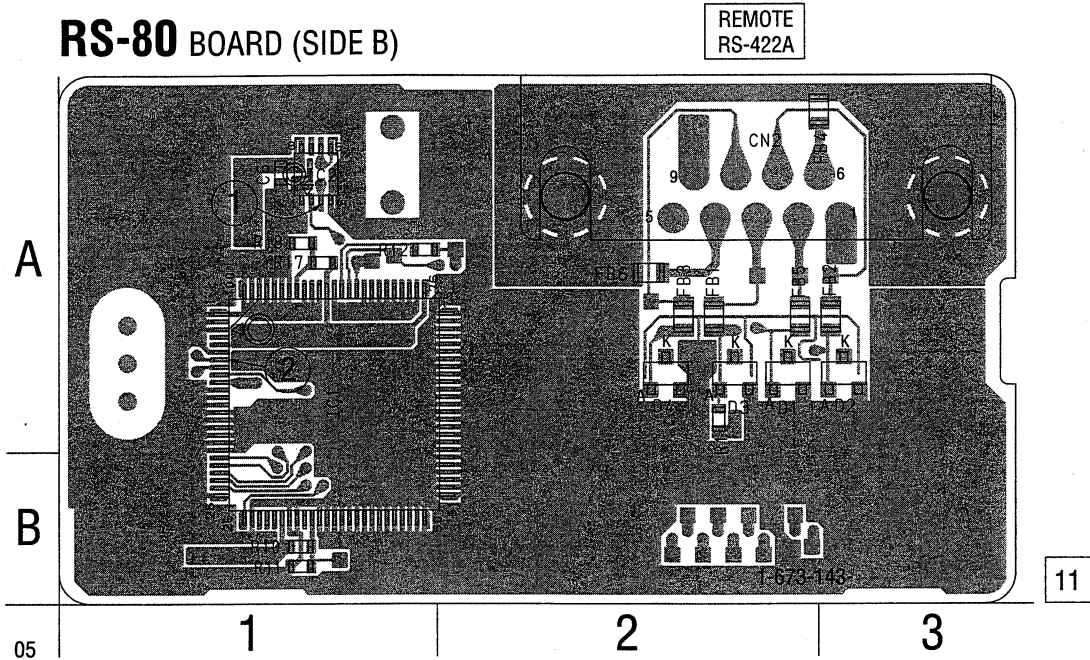
– Ref. No.: RS-80 board; 3,000 series –

- For Printed Wiring Board.
- There are few cases that the part isn't mounted in this model is printed on this diagram.



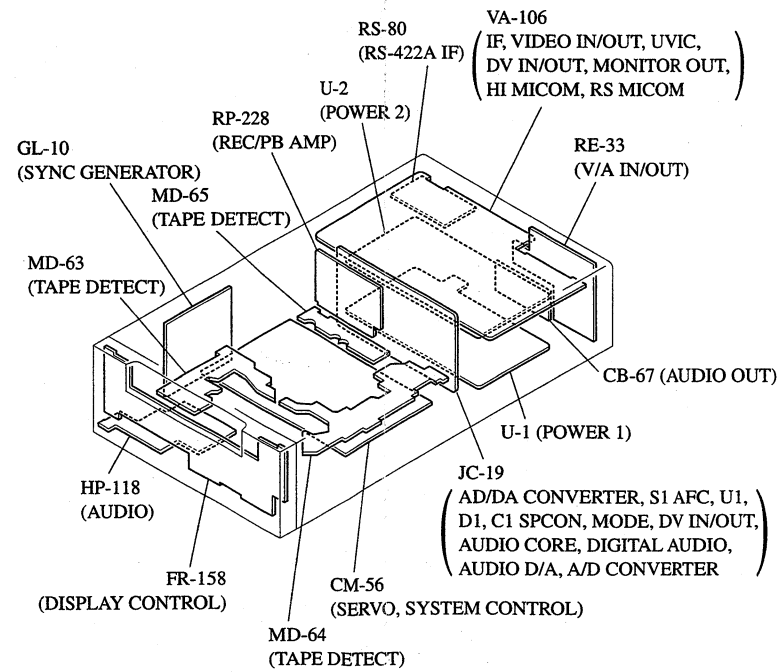
RS-80 BOARD (SIDE A)

CN1	B-1
D5	B-2
D6	B-2
D7	B-2
IC3	A-1



RS-80 BOARD (SIDE B)

CN2	A-2
D1	A-2
D2	A-3
D3	A-2
D4	A-2
IC1	A-1
IC2	A-2



## A

B

C



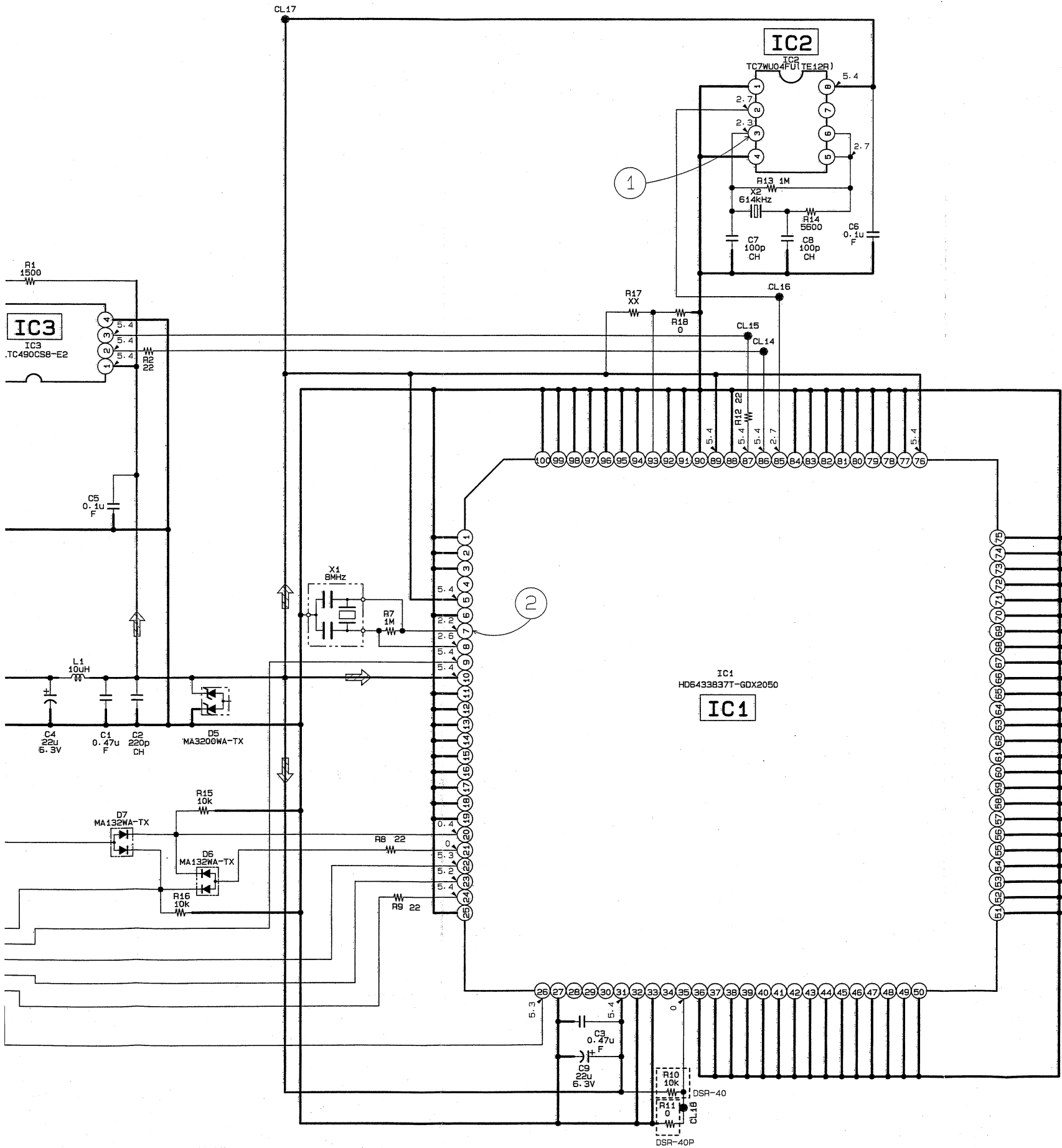
F

G

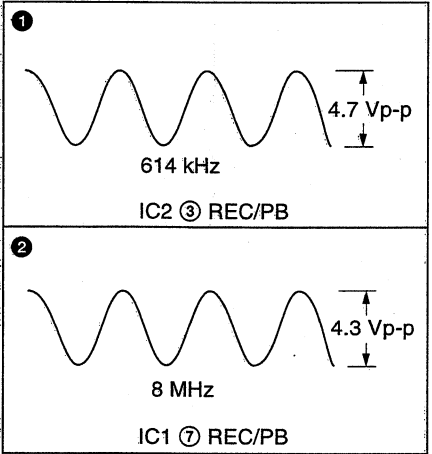
H

T

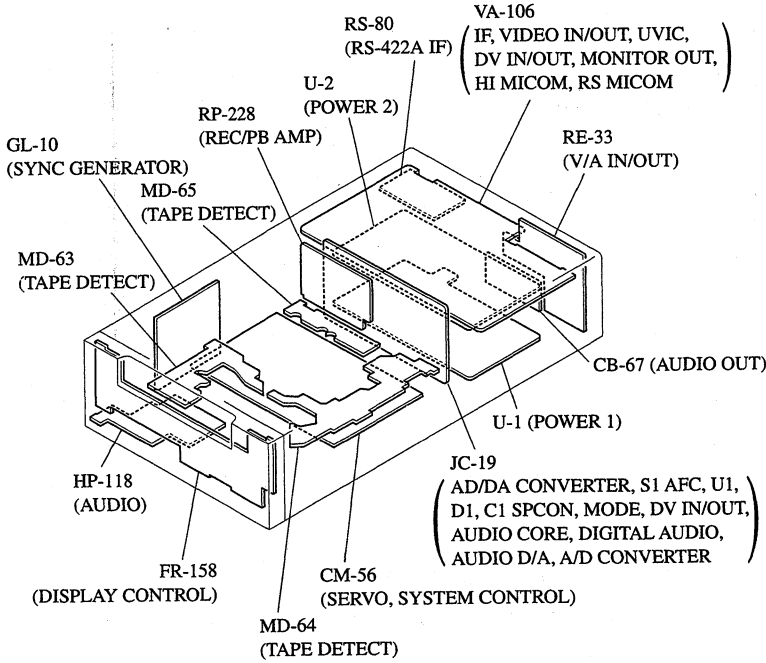
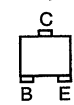
7 8 9 10 11 12 13 14 15



RS-80 BOARD



- For Printed Wiring Board.
- There are few cases that the part isn't mounted in this model is printed on this diagram.
- Chip transistor



FR-158 BOARD (SIDE A)

D101	A-1
D102	C-4
D108	B-7
D109	B-7
D110	B-7
D111	B-6
D112	B-6
D113	A-1
D114	A-1
D117	B-6
Q101	A-1

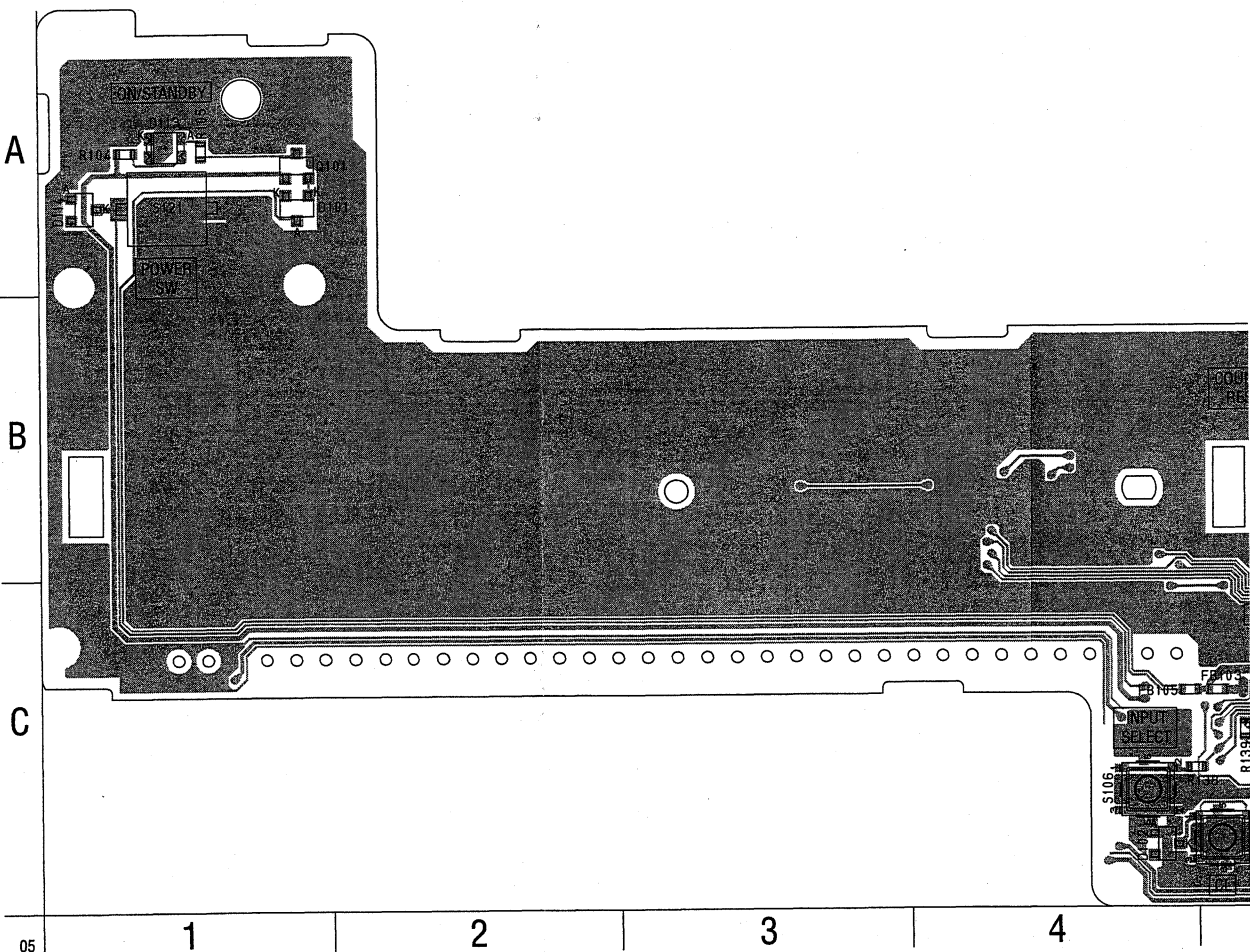
FR-158 BOARD (SIDE B)

CN104	A-5
D115	B-3
D116	A-5
IC103	B-5
IC104	B-3
Q103	B-7
Q104	B-7
Q105	B-7
Q106	B-6
Q107	B-6
Q110	B-6

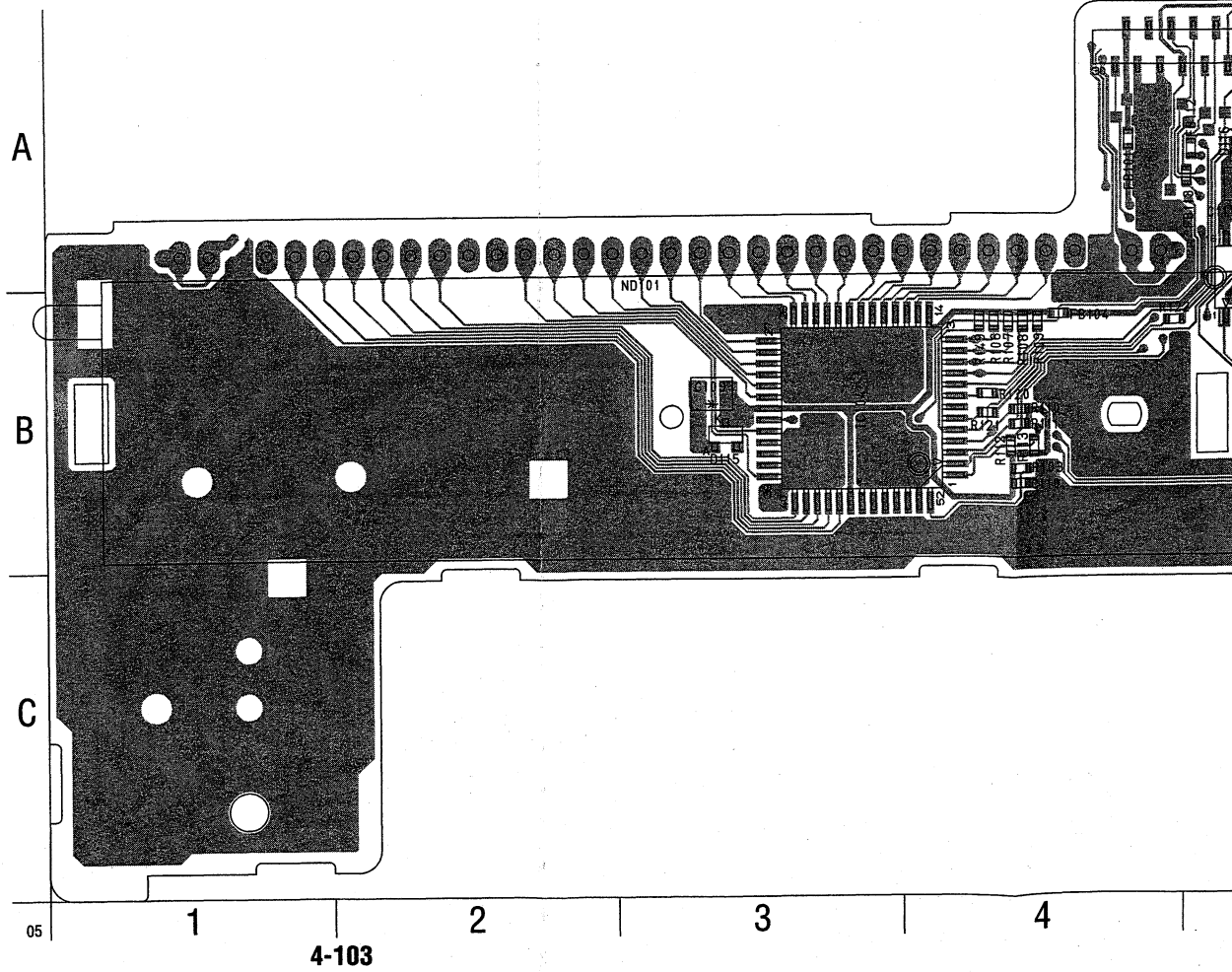
FR-158 (DISPLAY CONTROL) PRINTED WIRING BOARD

- Ref. No.: FR-158 board; 3,000 series -

FR-158 BOARD (SIDE A)



FR-158 BOARD (SIDE B)





## FR-158 BOARD (SIDE A)

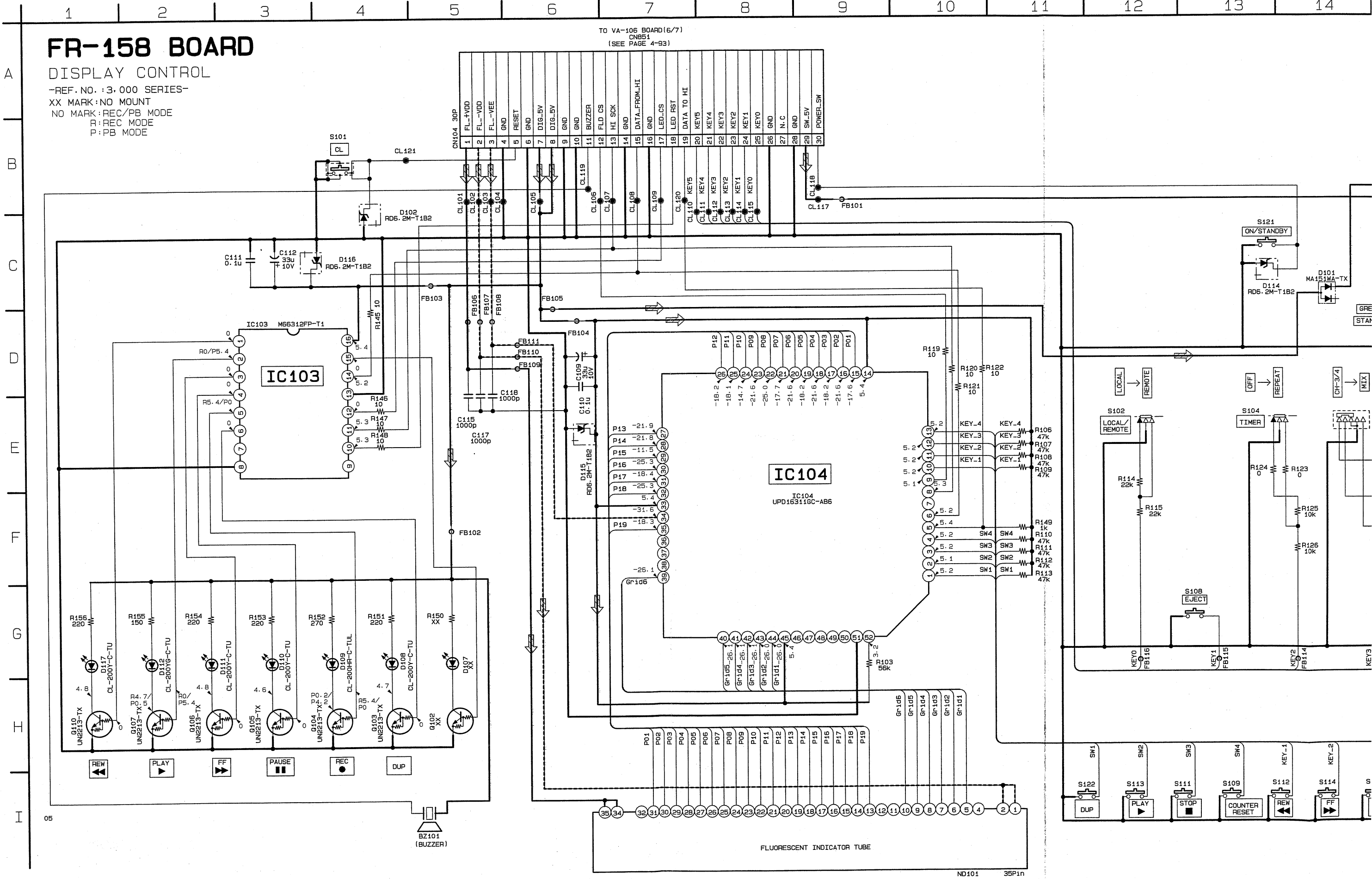
D101	A-1
D102	C-4
D108	B-7
D109	B-7
D110	B-7
D111	B-6
D112	B-6
D113	A-1
D114	A-1
D117	B-6
Q101	A-1

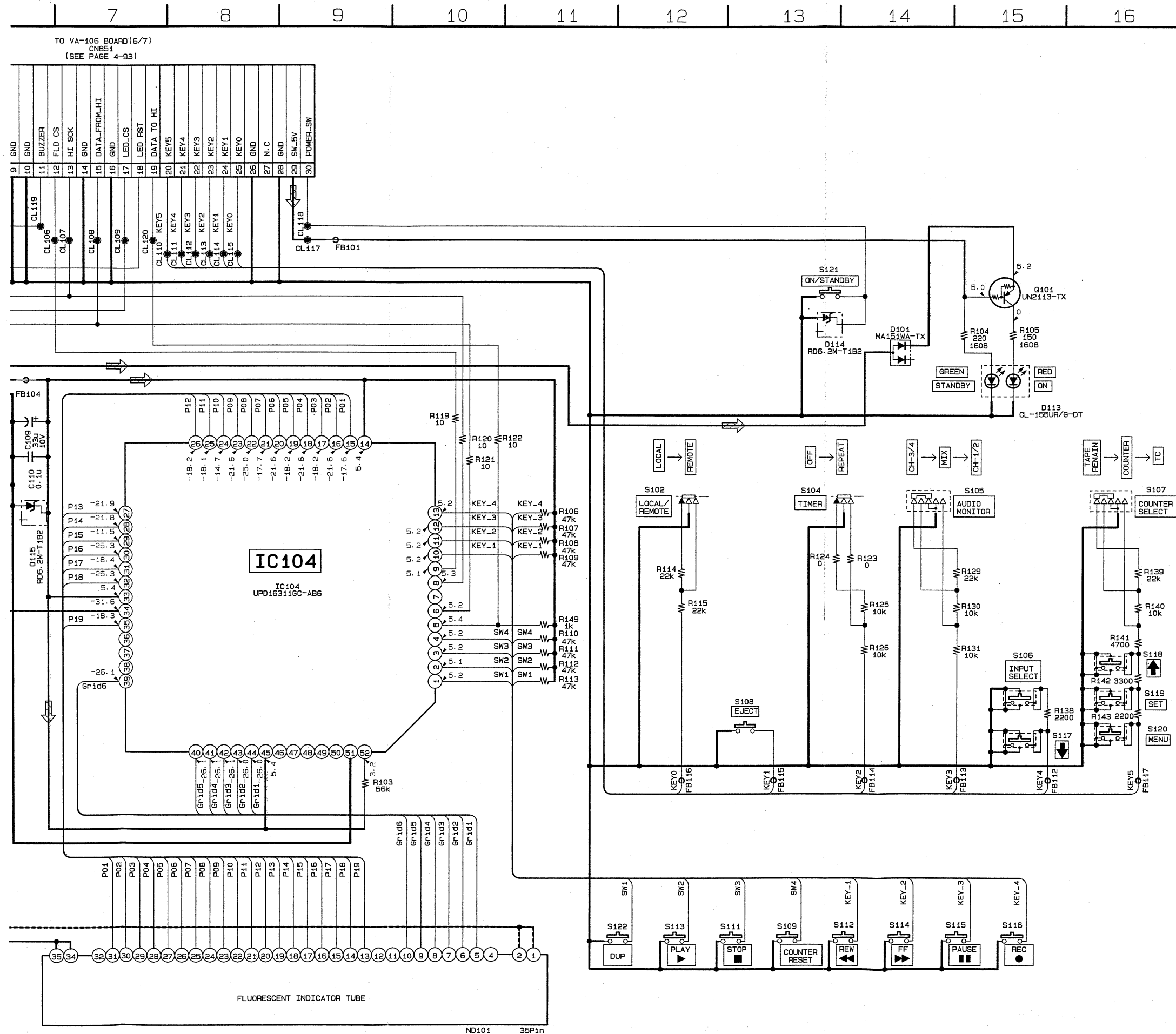
AFC, U1,  
V IN/OUT,  
AUDIO,  
RTER

CN104	A-5
D115	B-3
D116	A-5
IC103	B-5
IC104	B-3
Q103	B-7
Q104	B-7
Q105	B-7
Q106	B-6
Q107	B-6
Q110	B-6

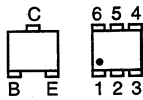
## FR-158 BOARD (SIDE B)







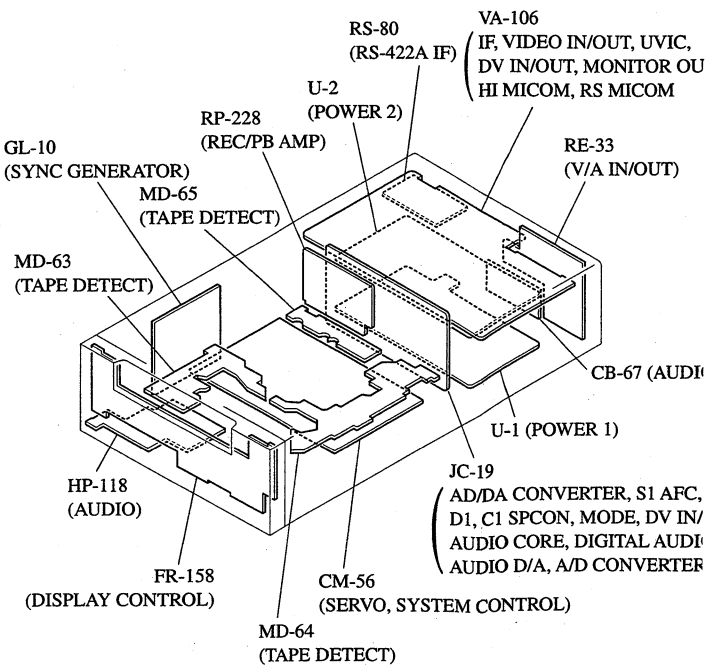
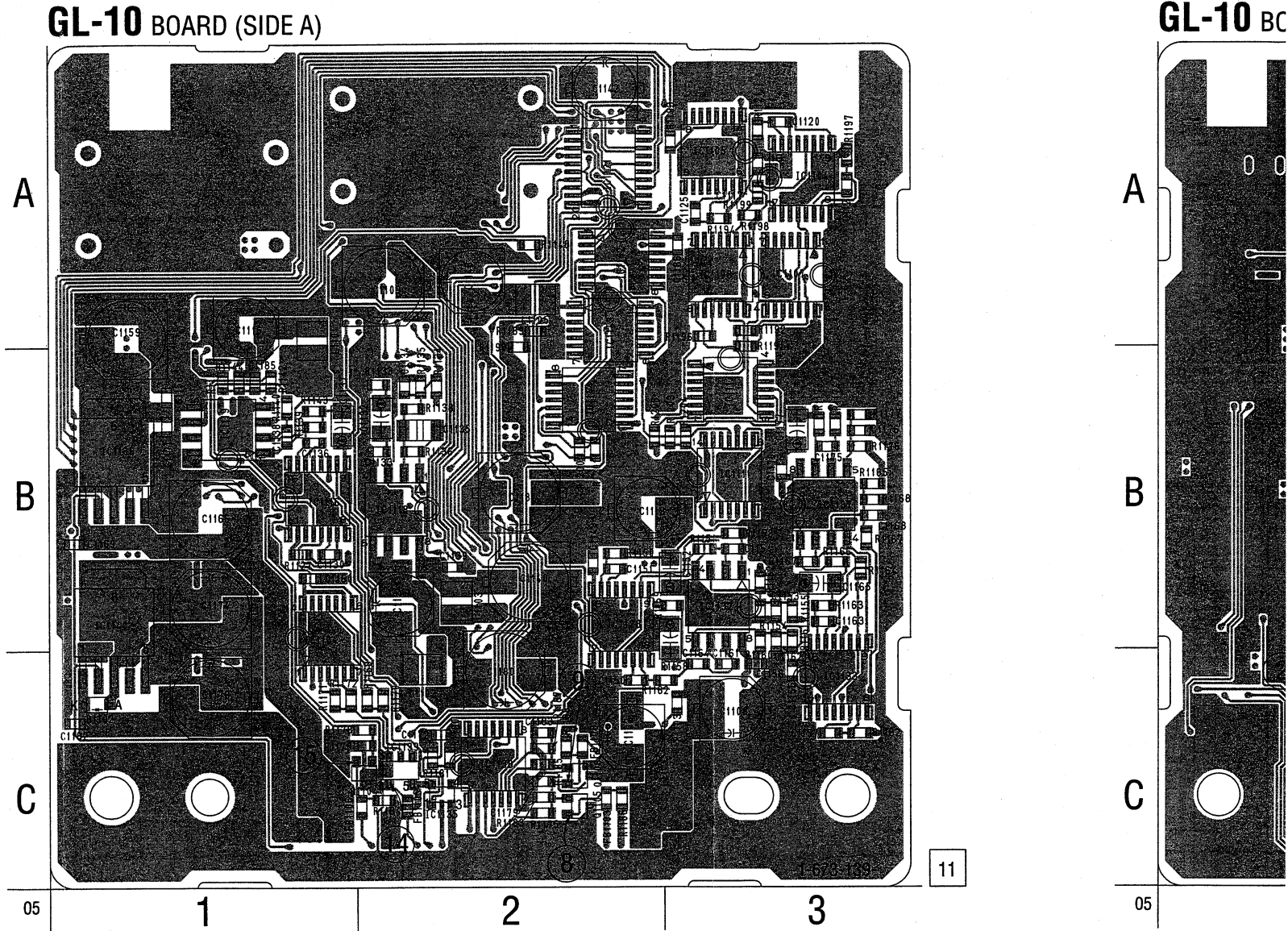
- For Printed Wiring Board.
- GL-10 board is 4-layer print board. However, the patterns of layers 2 to 3 have not been included in the diagram.
- There are few cases that the part isn't mounted in this model is printed on this diagram.
- Chip transistor



GL-10 BOARD (SIDE A)

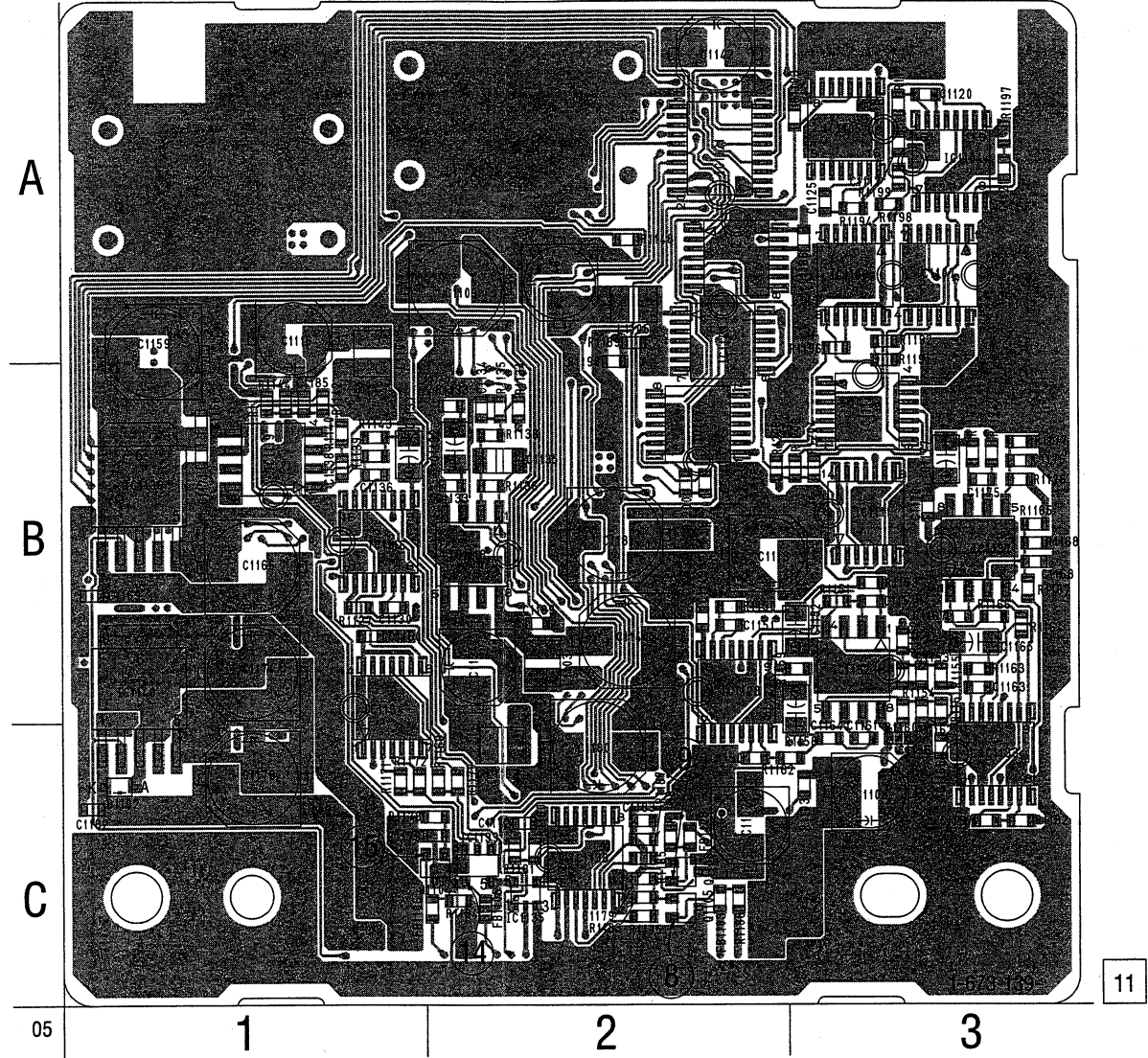
D1102	C-1
IC1104	A-3
IC1105	A-3
IC1107	A-3
IC1108	A-3
IC1111	B-3
IC1112	B-3
IC1116	B-1
IC1118	B-2
IC1119	B-1
IC1121	A-2
IC1128	B-2
IC1132	B-3
IC1133	C-3
IC1134	B-1
IC1135	C-2
IC1136	B-1
IC1137	B-3
IC1138	C-2
IC1139	C-2
IC1140	B-1
IC1142	A-2
IC1143	A-2
IC1144	B-2
Q1104	C-2
Q1105	C-2
Q1106	C-2

GL-10 (SYNC GENERATOR) PRINTED WIRING BOARD  
- Ref. No.: GL-10 board; 20,000 series -

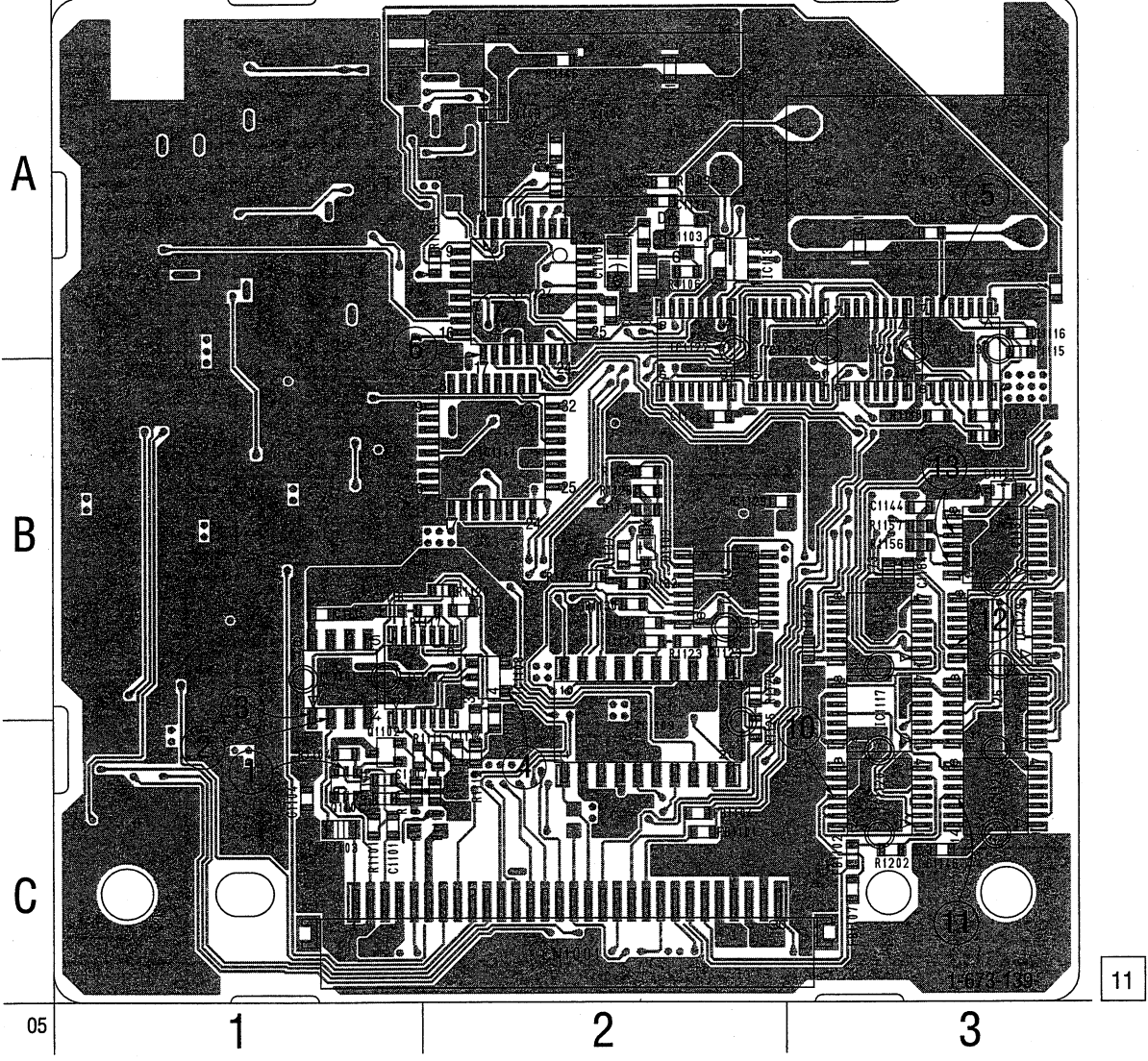


**GL-10 (SYNC GENERATOR) PRINTED WIRING BOARD**  
- Ref. No.: GL-10 board; 20,000 series -

**GL-10 BOARD (SIDE A)**

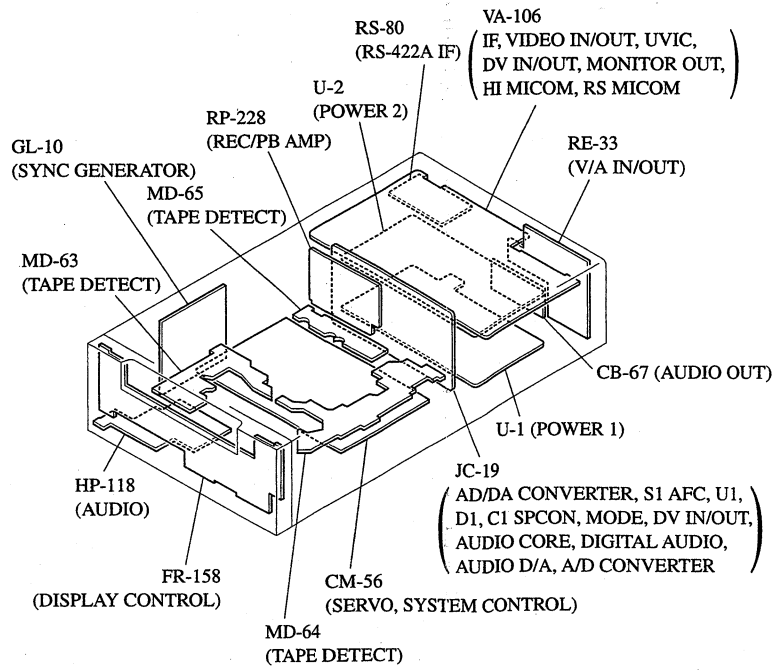


**GL-10 BOARD (SIDE B)**



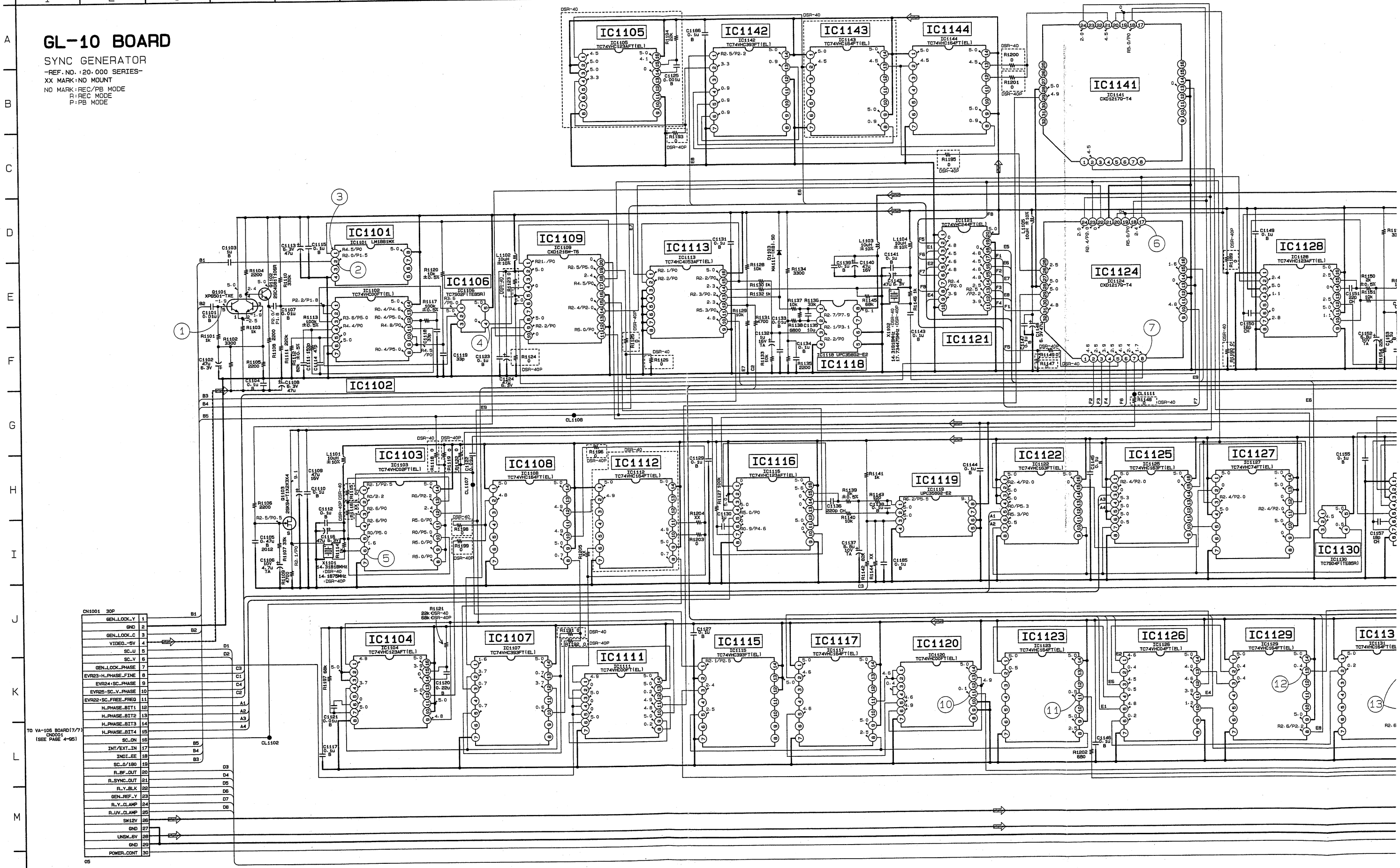
GL-10 BOARD (SIDE B)

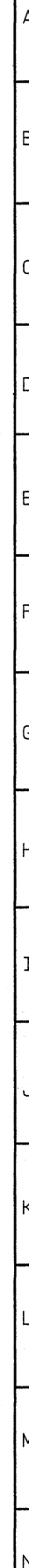
CN1001	C-2
D1101	B-3
D1103	B-2
IC1101	B-1
IC1102	B-2
IC1103	A-3
IC1106	B-2
IC1109	B-2
IC1113	B-2
IC1115	B-3
IC1117	B-3
IC1120	C-3
IC1122	A-2
IC1123	C-3
IC1124	A-2
IC1125	A-2
IC1126	B-3
IC1127	A-3
IC1129	B-3
IC1130	A-2
IC1131	B-3
IC1141	B-2
Q1101	C-1
Q1102	C-1
Q1103	A-2





GL-10 (SYNC GENERATOR) SCHEMATIC DIAGRAM





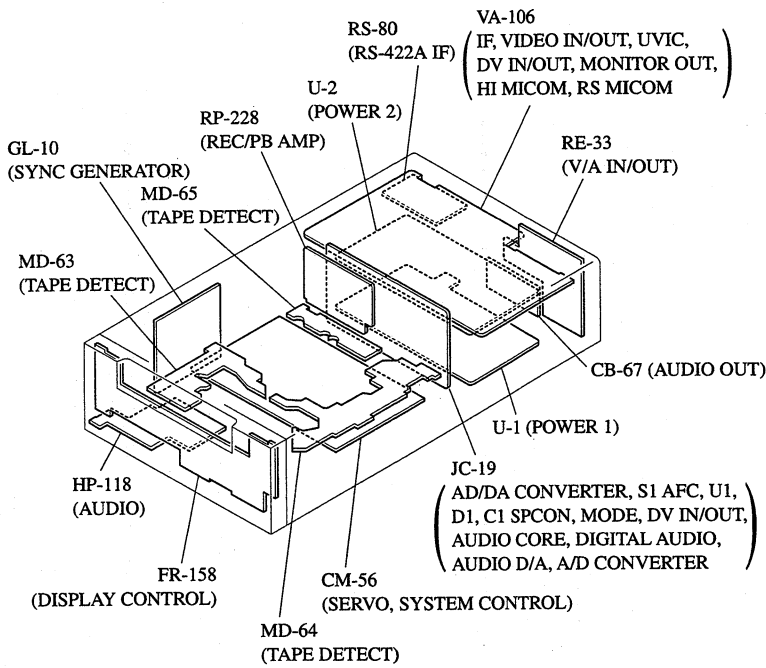
<p>1</p> <p>600 mVp-p</p> <p>H</p> <p>Q1101 ⑤ REC</p>	<p>9</p> <p>450 mVp-p</p> <p>DSR-40: 3.58 MHz DSR-40P: 4.43 MHz</p> <p>Q1106 E REC/PB</p>
<p>2</p> <p>1 Vp-p</p> <p>H</p> <p>IC1101 ② REC</p>	<p>10</p> <p>5 Vp-p</p> <p>H</p> <p>IC1120 ⑪ REC/PB</p>
<p>3</p> <p>5 Vp-p</p> <p>H</p> <p>IC1101 ① REC</p>	<p>11</p> <p>5.3 Vp-p</p> <p>H</p> <p>IC1123 ⑪ REC/PB</p>
<p>4</p> <p>6 Vp-p</p> <p>H</p> <p>IC1106 ④ REC</p>	<p>12</p> <p>5.3 Vp-p</p> <p>H</p> <p>IC1129 ⑬ REC/PB</p>
<p>5</p> <p>5.5 Vp-p</p> <p>DSR-40: 14.32 MHz DSR-40P: 14.19 MHz</p> <p>IC1103 ⑥ REC/PB</p>	<p>13</p> <p>5.3 Vp-p</p> <p>H</p> <p>DSR-40: IC1131 ⑩ REC/PB DSR-40P: IC1131 ⑬ REC/PB</p>
<p>6</p> <p>6.5 Vp-p</p> <p>DSR-40: 3.58 MHz DSR-40P: 4.43 MHz</p> <p>IC1124 ⑰ REC/PB</p>	<p>14</p> <p>5.5 Vp-p</p> <p>H</p> <p>IC1139 ④ REC/PB</p>
<p>7</p> <p>5.5 Vp-p</p> <p>DSR-40: 14.32 MHz DSR-40P: 17.73 MHz</p> <p>IC1124 ⑨ REC/PB</p>	<p>15</p> <p>1.6 Vp-p</p> <p>H</p> <p>IC1104 E REC/PB</p>
<p>8</p> <p>450 mVp-p</p> <p>DSR-40: 3.58 MHz DSR-40P: 4.43 MHz</p> <p>Q1105 E REC/PB</p>	



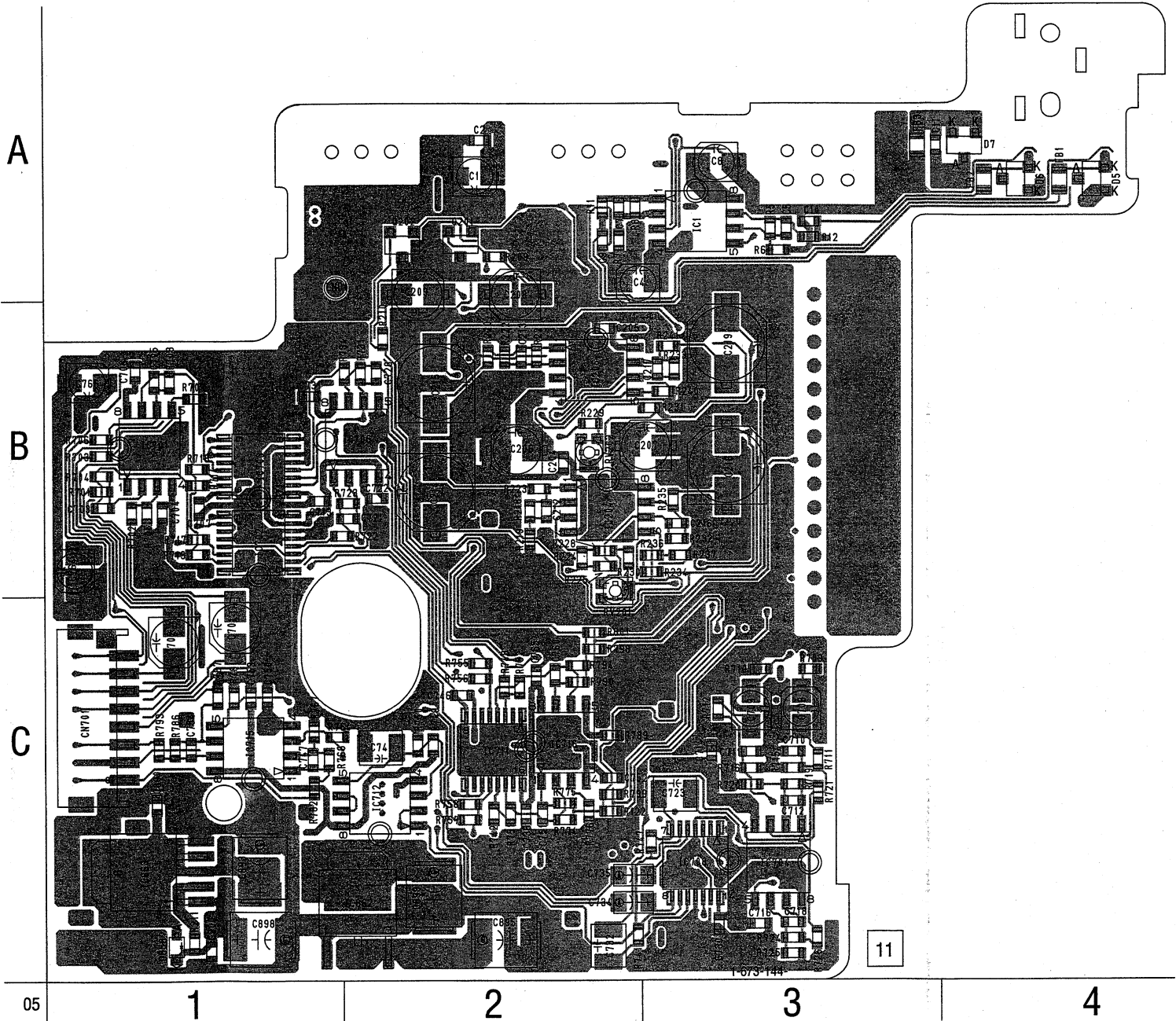
HP-118 (AUDIO) PRINTED WIRING BOARD

– Ref. No.: HP-118 board; 4,000 series –

- For Printed Wiring Board.
- HP-118 board is 4-layer print board. However, the patterns of layers 2 and 3 have not been included in the diagram.
- There are few cases that the part isn't mounted in this model is printed on this diagram.
- Chip transistor



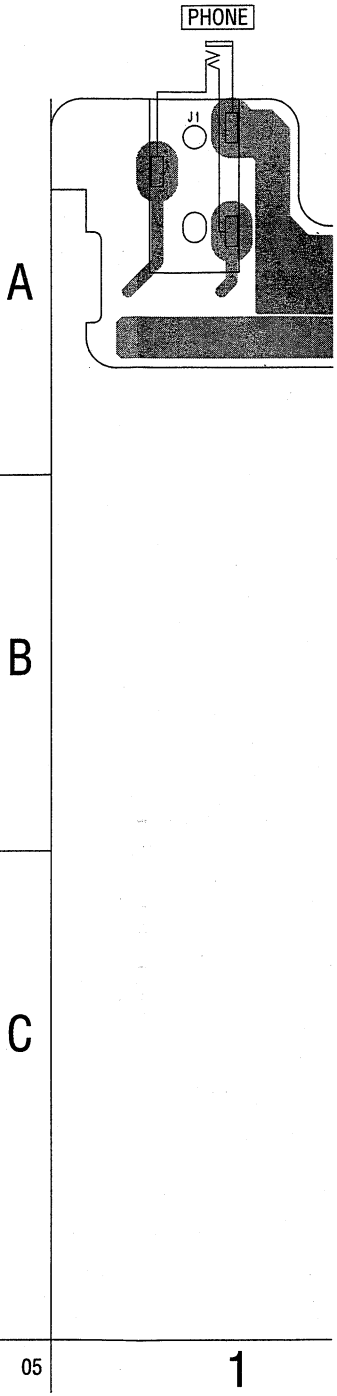
HP-118 BOARD (SIDE A)



HP-118 BOARD (SIDE A)

CN701	C-1
D5	A-4
D6	A-4
D7	A-4
D858	C-1
IC1	A-3
IC204	B-2
IC205	B-2
IC701	B-1
IC702	B-1
IC703	B-1
IC704	C-3
IC706	B-2
IC708	C-3
IC711	C-2
IC712	C-2
IC715	C-1
IC716	C-2
IC862	C-2
IC863	C-1
Q201	A-2
Q202	A-2

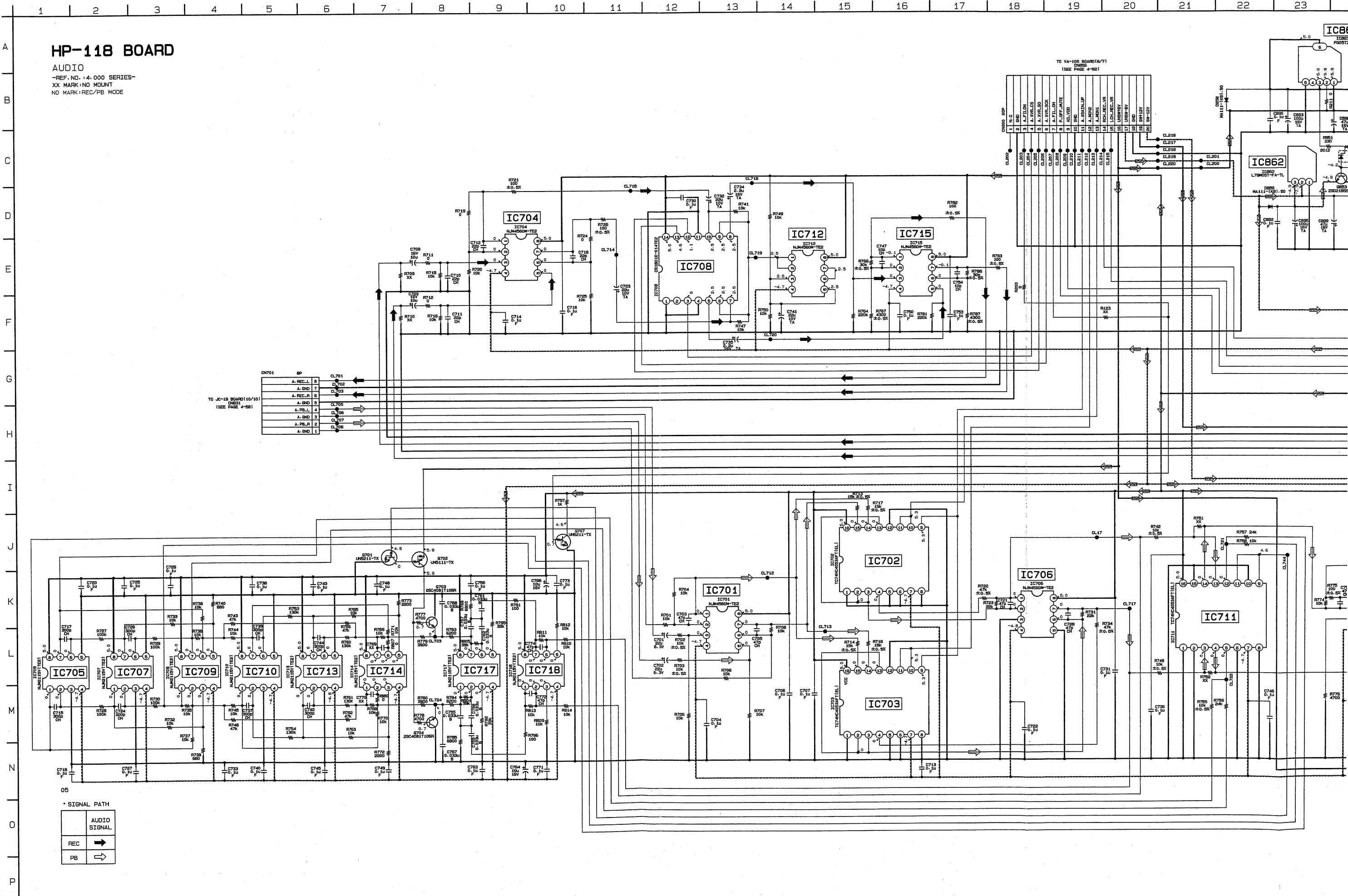
HP-118 BOARD (S

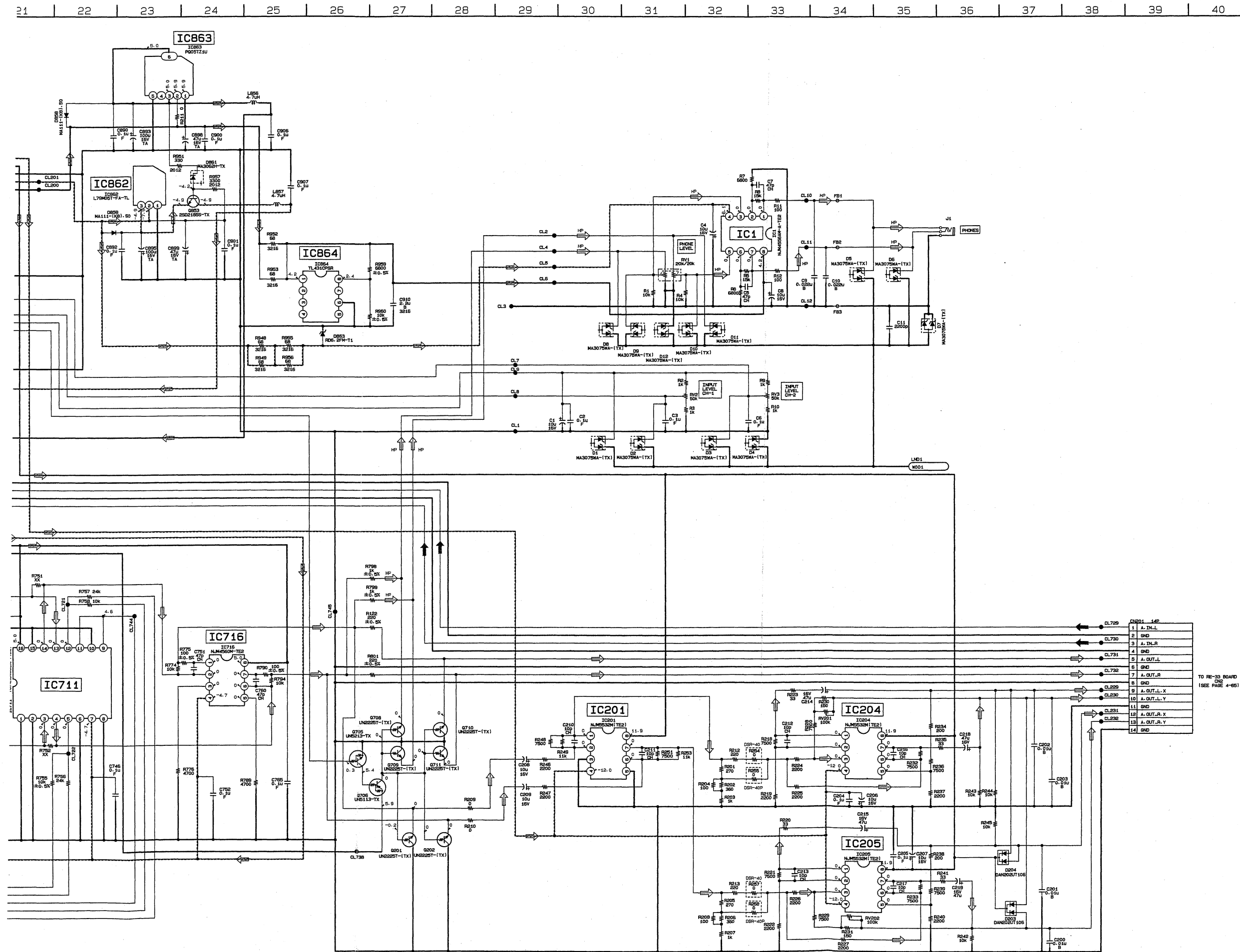


V23312 / Druck 70

**4-118**

HP-118 (AUDIO) SCHEMATIC DIAGRAM



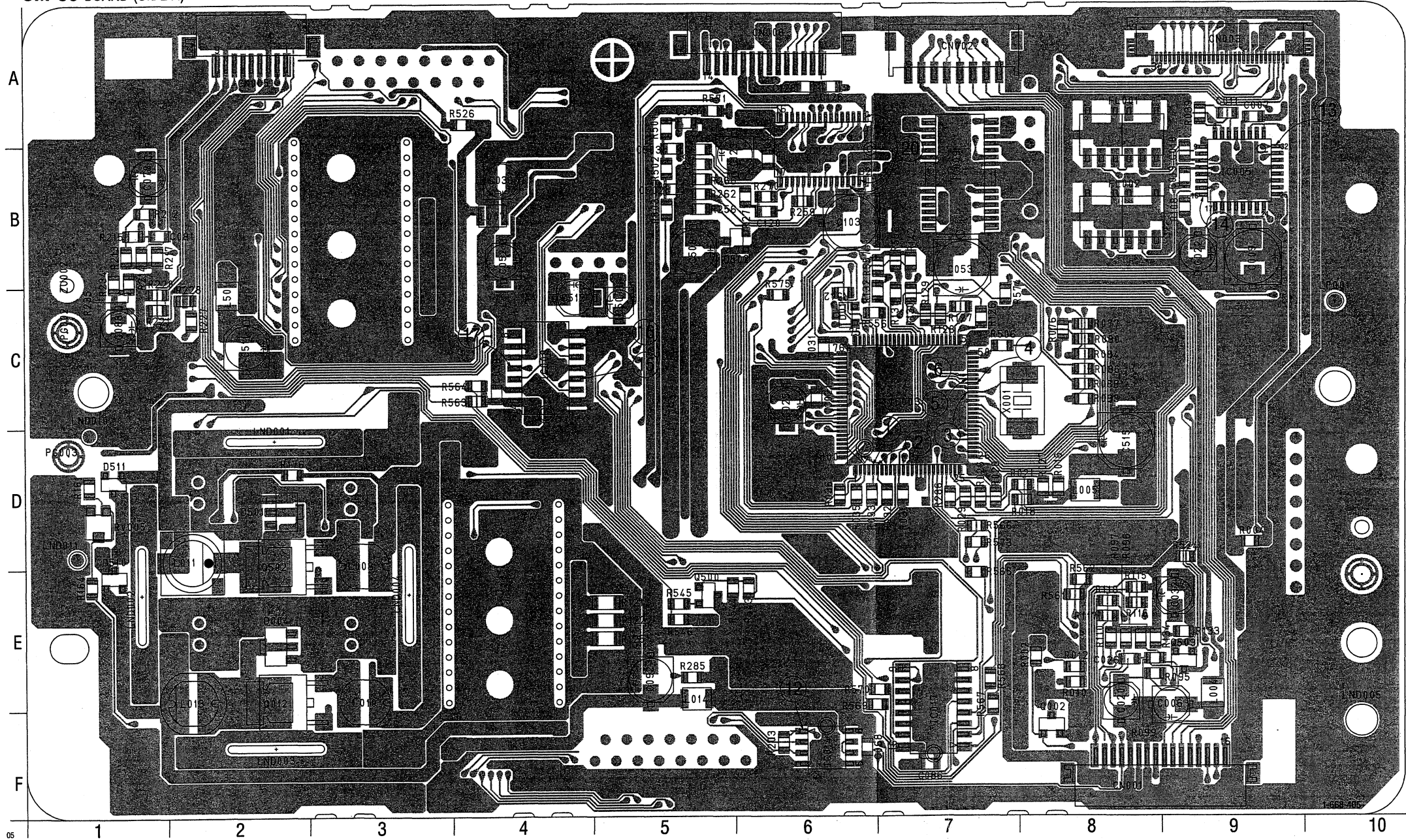




CM-56 (SERVO, SYSTEM CONTROL) PRINTED WIRING BOARD

– Ref. No.: CM-56 board; 2,000 series –

CM-56 BOARD (SIDE A)



• For Printed Wiring Board.

• There are few cases that the part isn't mounted in this model is printed on this diagram.

• Chip transistor

C

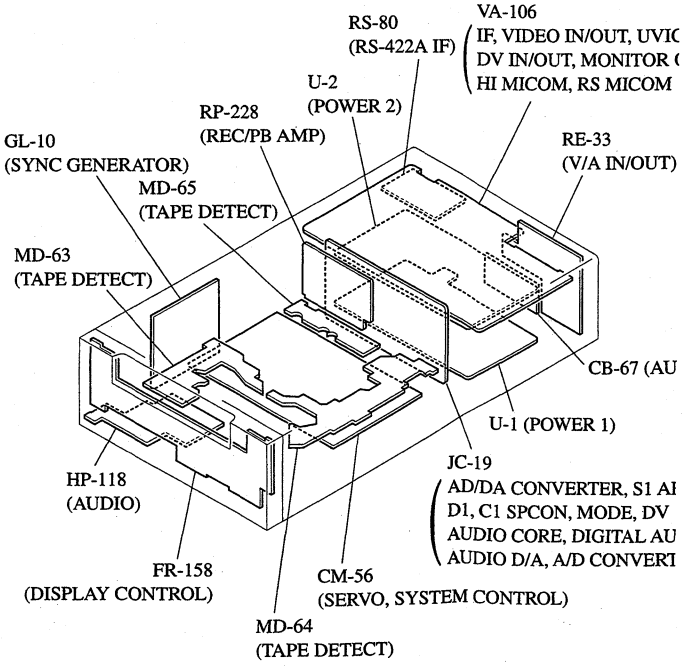
4 5 6

B E 3 2 1

CM-56 BOARD (SIDE A)

CN001	F-8
CN002	A-7
CN003	A-9
CN005	A-2
CN008	A-6
D004	E-2
D011	C-6
D501	D-2
D502	B-5
IC003	C-7
IC005	B-9
IC008	C-4
IC009	B-7
IC014	F-6
IC017	F-7
IC021	A-6
Q002	F-8
Q012	E-2
Q500	E-5
Q502	D-2
Q503	E-9

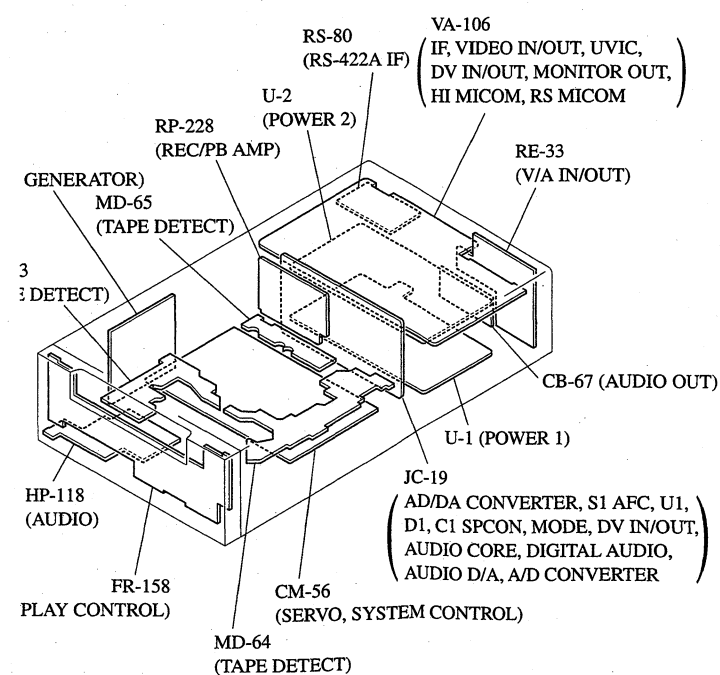
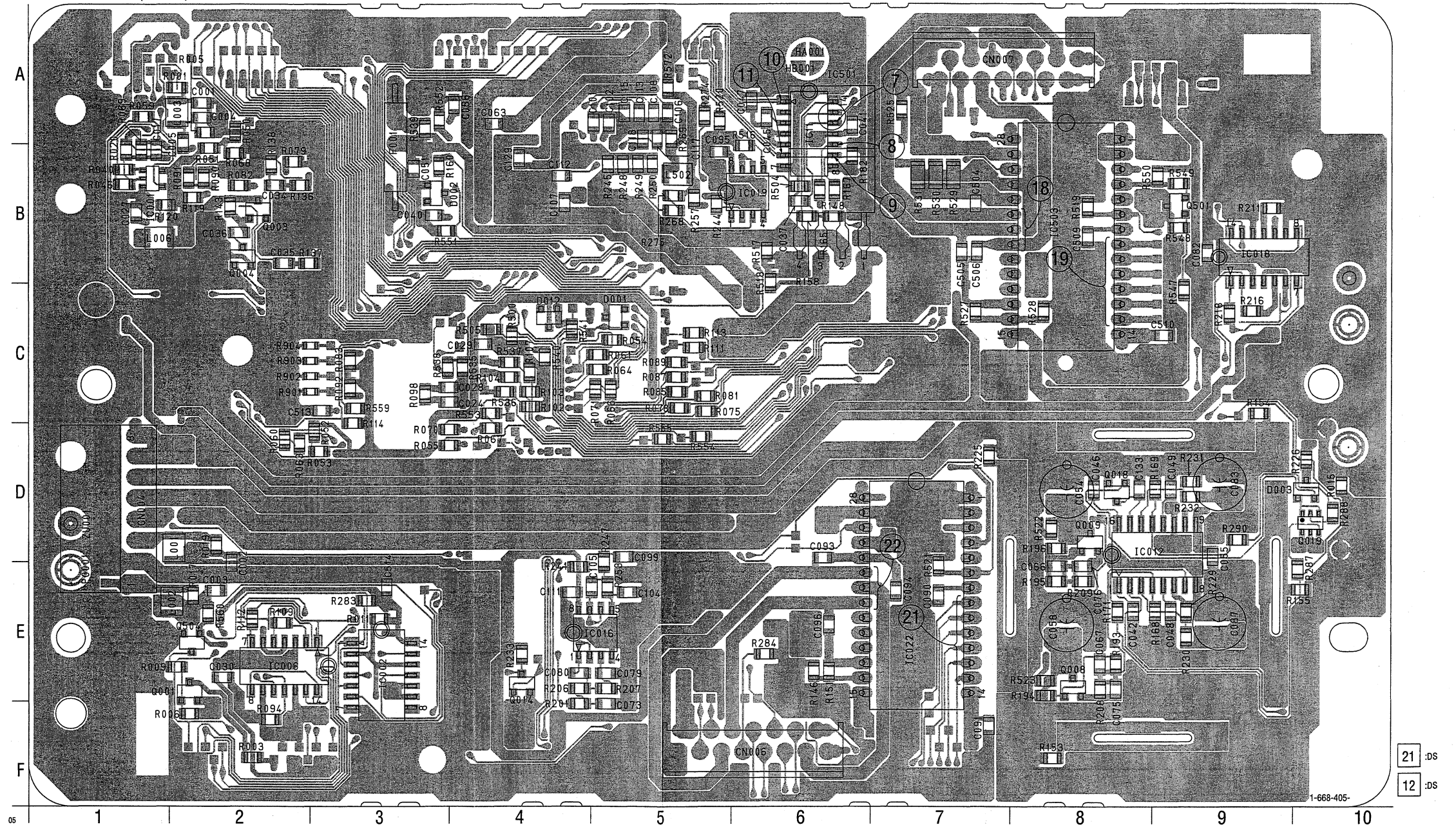
21	:DSR-40P
12	:DSR-40





**Wiring Board.**  
 ew cases that the part isn't mounted in this model is  
 is diagram.  
 for

**CM-56 BOARD (SIDE B)**

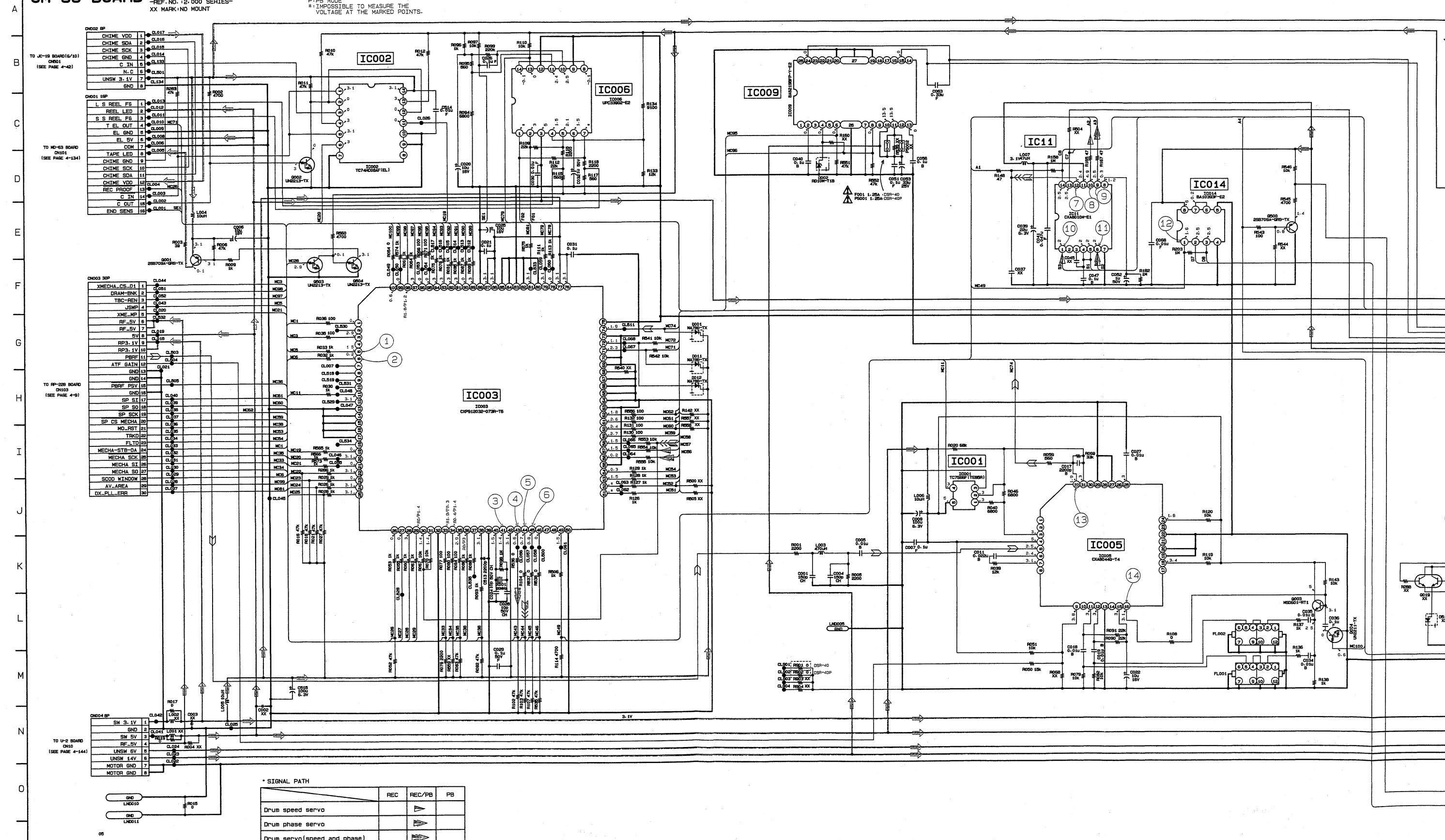


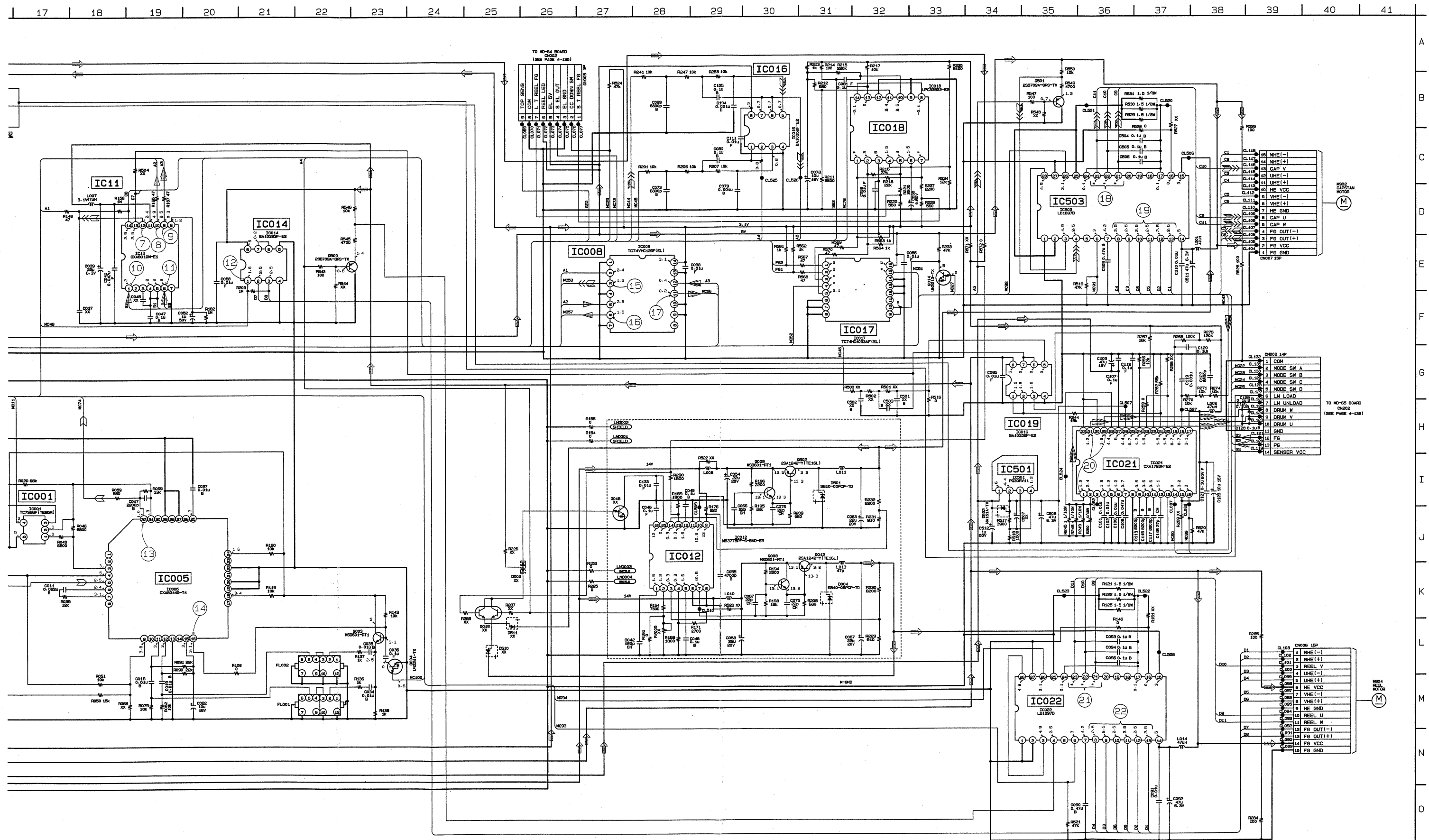
**CM-56 BOARD  
(SIDE B)**

CN004	D-1
CN006	F-5
CN007	A-7
D001	C-5
D002	B-3
D012	C-4
IC001	B-1
IC002	E-3
IC006	E-2
IC011	A-6
IC012	D-8
IC016	E-4
IC018	B-9
IC019	B-6
IC022	D-7
IC501	B-6
IC503	B-8
Q001	E-2
Q003	B-2
Q004	B-2
Q008	E-8
Q009	D-8
Q014	E-4
Q501	B-9
Q504	E-2

A horizontal timeline with 25 numbered segments, each containing a small icon representing a different activity. The icons are as follows:

- 1: A person sitting at a desk with a laptop.
- 2: A person standing at a podium, speaking into a microphone.
- 3: A person sitting at a desk with a laptop.
- 4: A person sitting at a desk with a laptop.
- 5: A person sitting at a desk with a laptop.
- 6: A person sitting at a desk with a laptop.
- 7: A person sitting at a desk with a laptop.
- 8: A person sitting at a desk with a laptop.
- 9: A person sitting at a desk with a laptop.
- 10: A person sitting at a desk with a laptop.
- 11: A person sitting at a desk with a laptop.
- 12: A person sitting at a desk with a laptop.
- 13: A person sitting at a desk with a laptop.
- 14: A person sitting at a desk with a laptop.
- 15: A person sitting at a desk with a laptop.
- 16: A person sitting at a desk with a laptop.
- 17: A person sitting at a desk with a laptop.
- 18: A person sitting at a desk with a laptop.
- 19: A person sitting at a desk with a laptop.
- 20: A person sitting at a desk with a laptop.
- 21: A person sitting at a desk with a laptop.
- 22: A person sitting at a desk with a laptop.
- 23: A person sitting at a desk with a laptop.
- 24: A person sitting at a desk with a laptop.
- 25: A person sitting at a desk with a laptop.



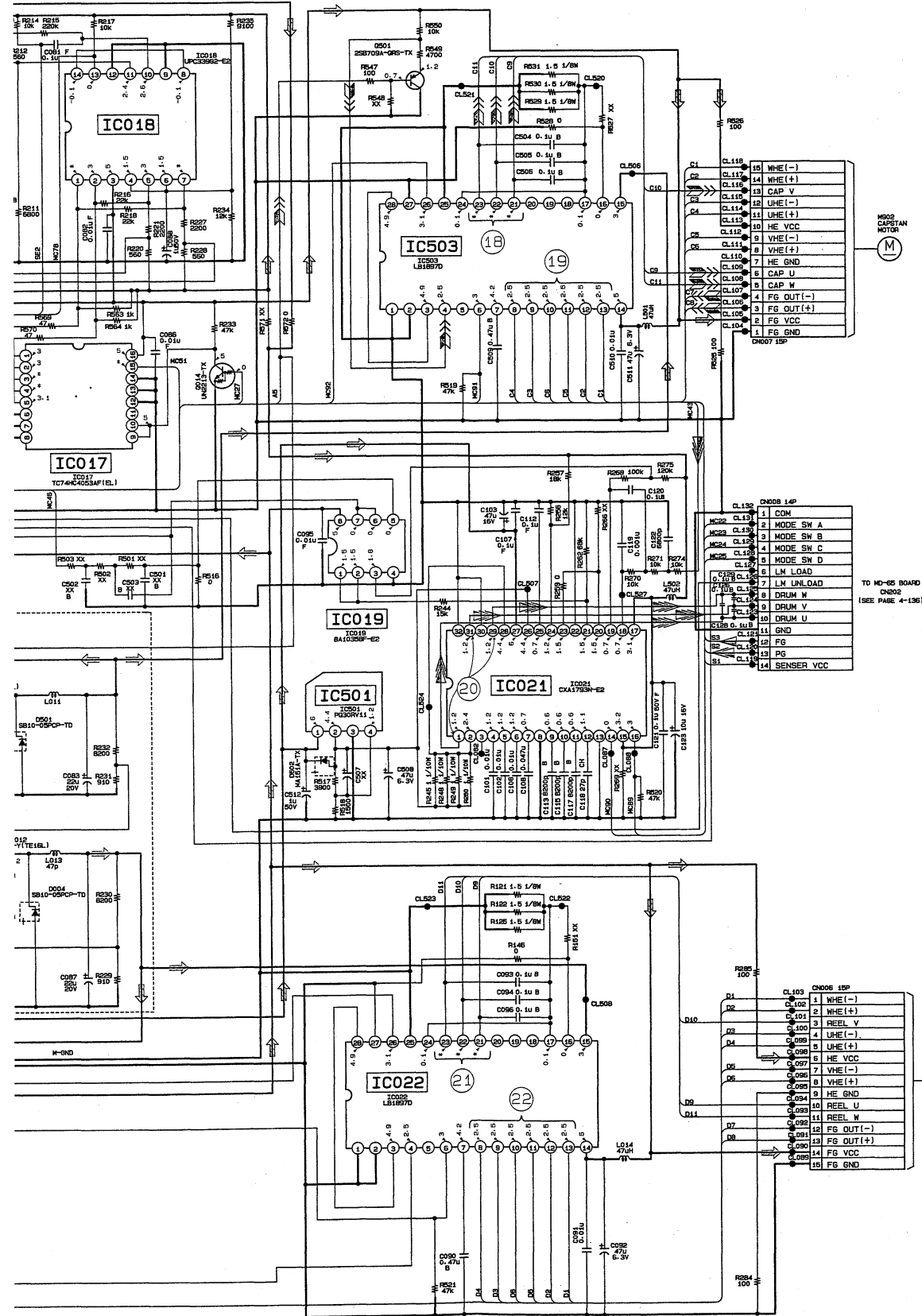


The components identified by mark  $\triangle$  or dotted line with mark  $\triangle$  are critical for safety.  
Replace only with part number specified.

Les composants identifiés par une marque  $\Delta$  sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.



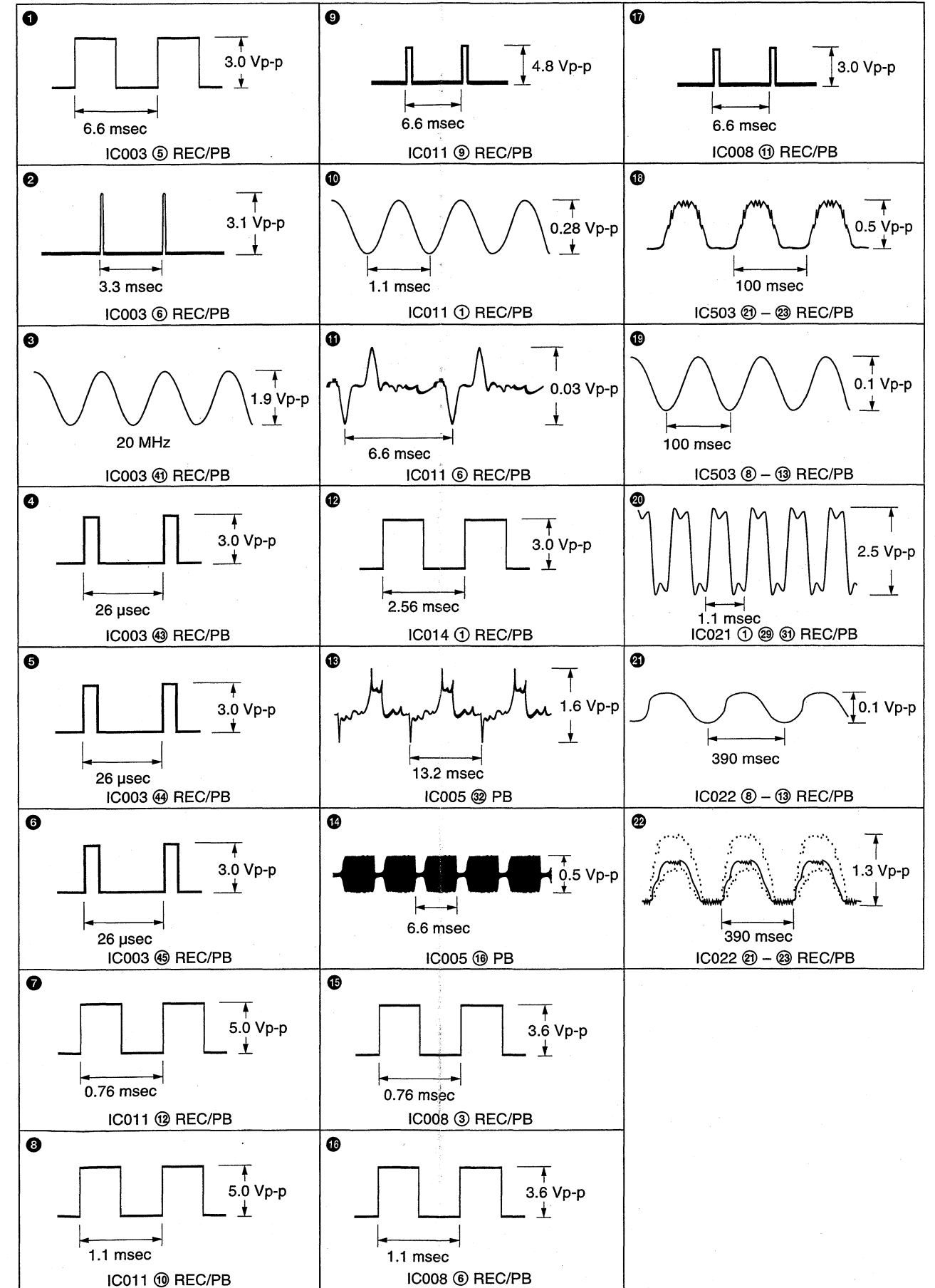
31 32 33 34 35 36 37 38 39 40 41



The components identified by mark  $\Delta$  or dotted line with mark  $\Delta$  are critical for safety. Replace only with part number specified.

Les composants identifiés par une marque  $\Delta$  sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

CM-56 BOARD



4-131

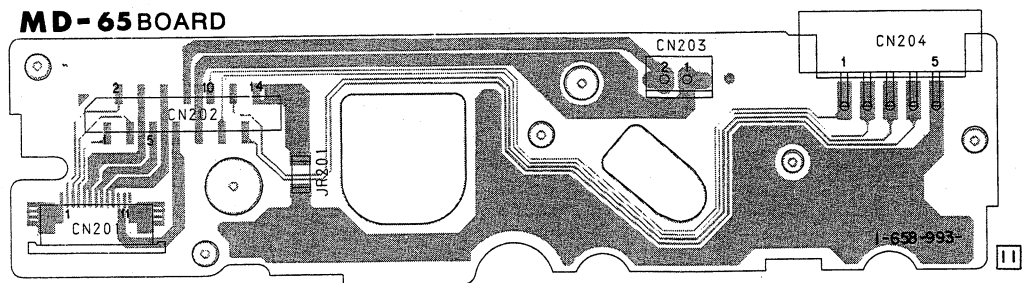
SERVO, SYSTEM CONTROL  
CM-56

MD-63, MD-64, MD-65 (TAPE DETECT), FP-406 (TAPE SENSOR) PRINTED WIRING BOARDS AND SCHEMATIC DIAGRAM

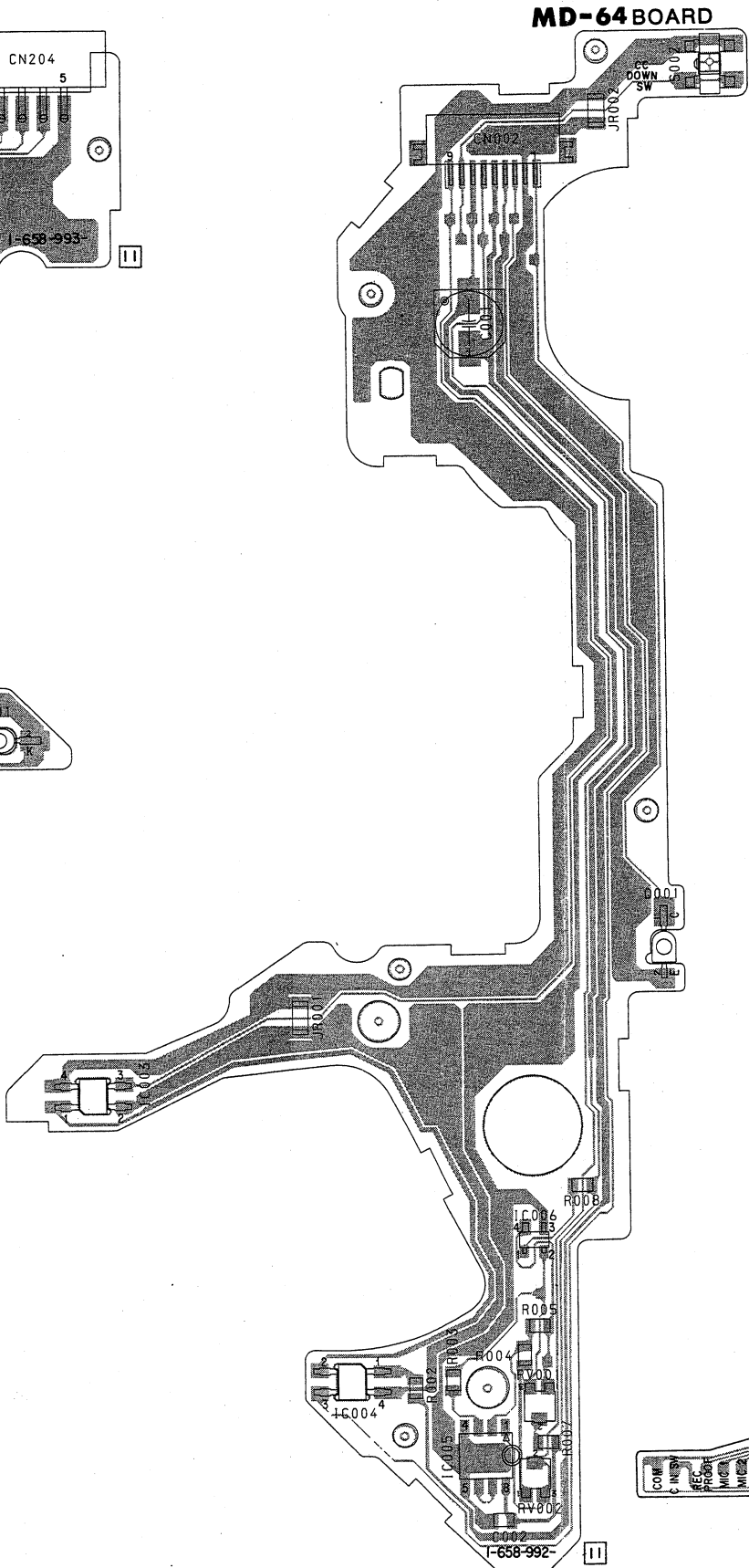
– Ref. No.: MD-63 board; 8,000/MD-64 board; 8,000/MD-65 board; 8,000/FP-406 board; 8,000 series –

- For Printed Wiring Board.
- There are few cases that the part isn't mounted in this model on this diagram.

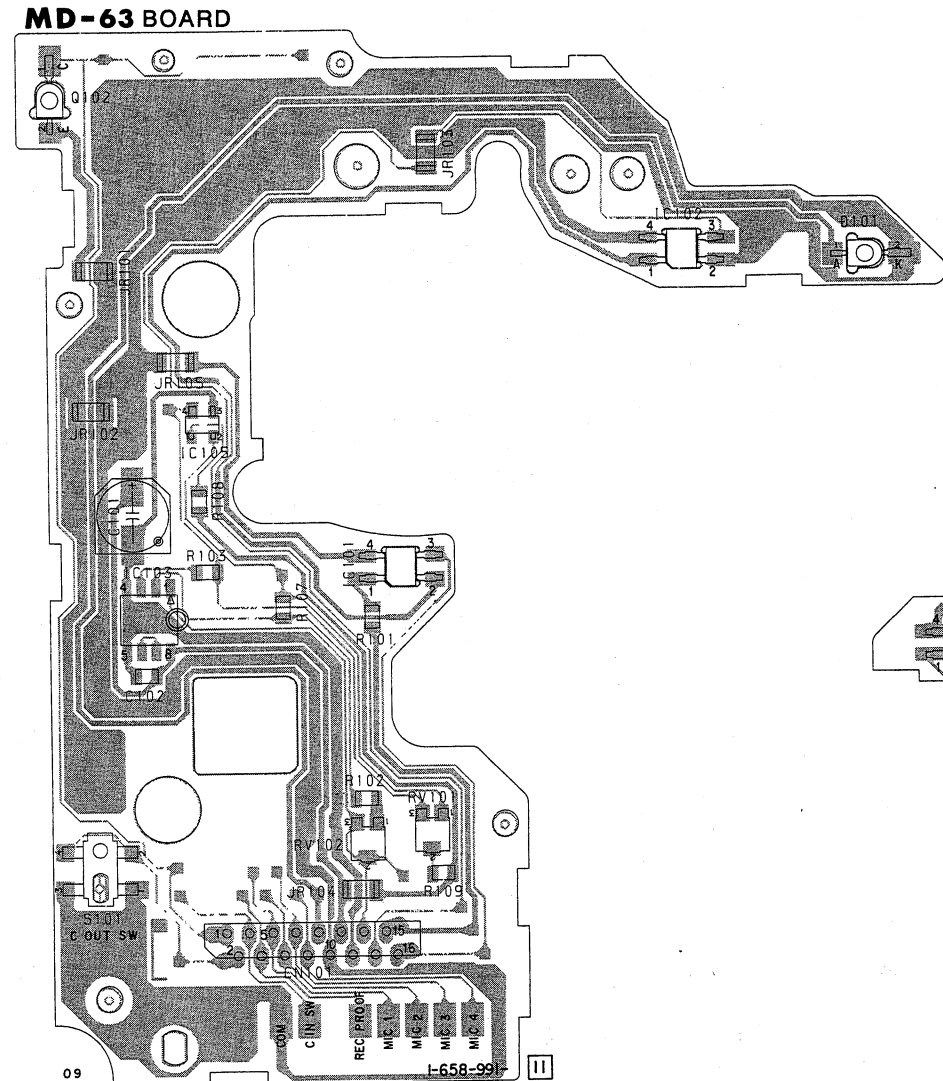
MD-65 BOARD



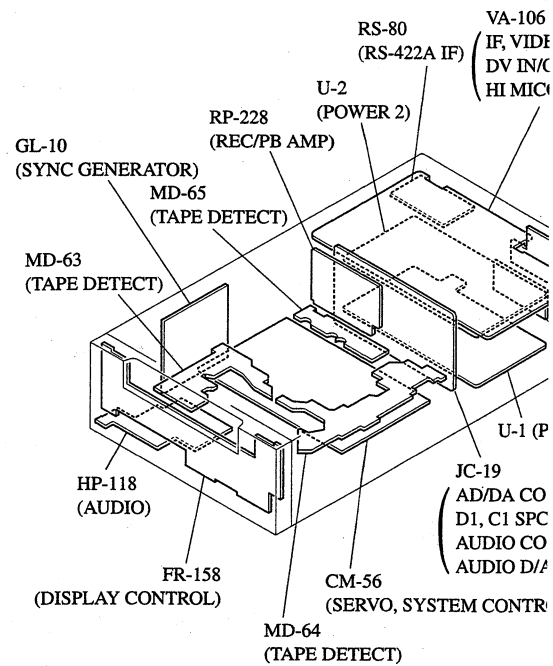
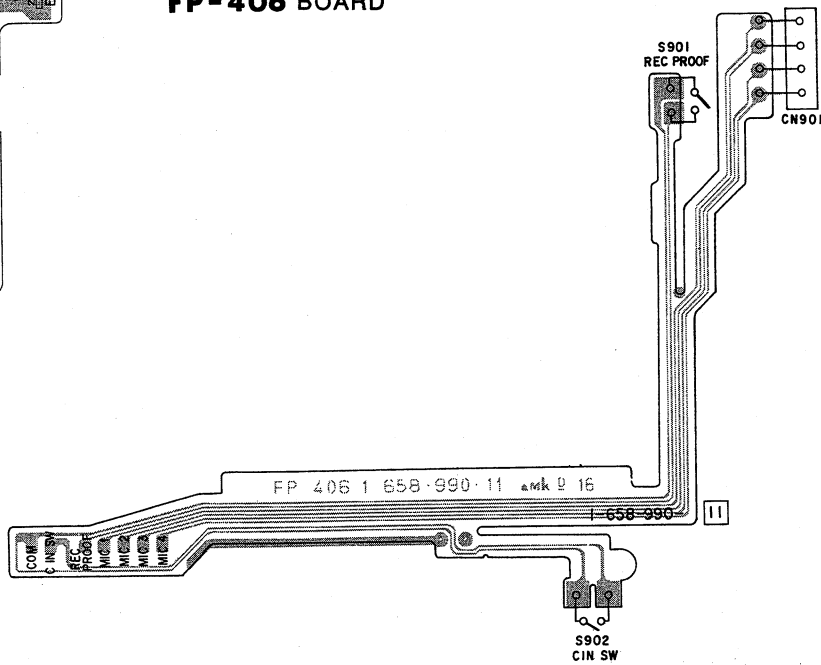
MD-64 BOARD



MD-63 BOARD

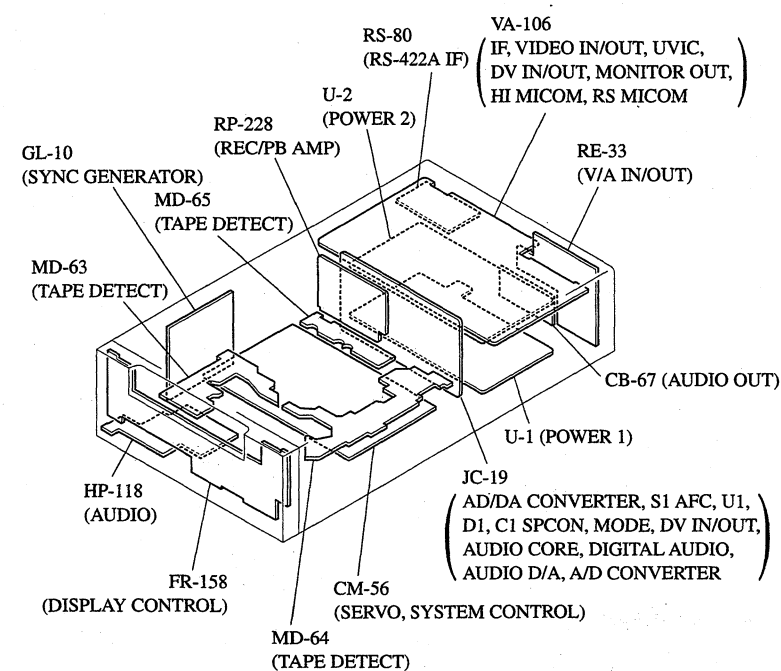
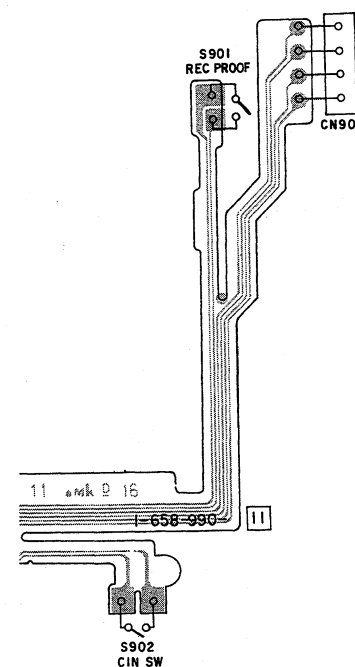
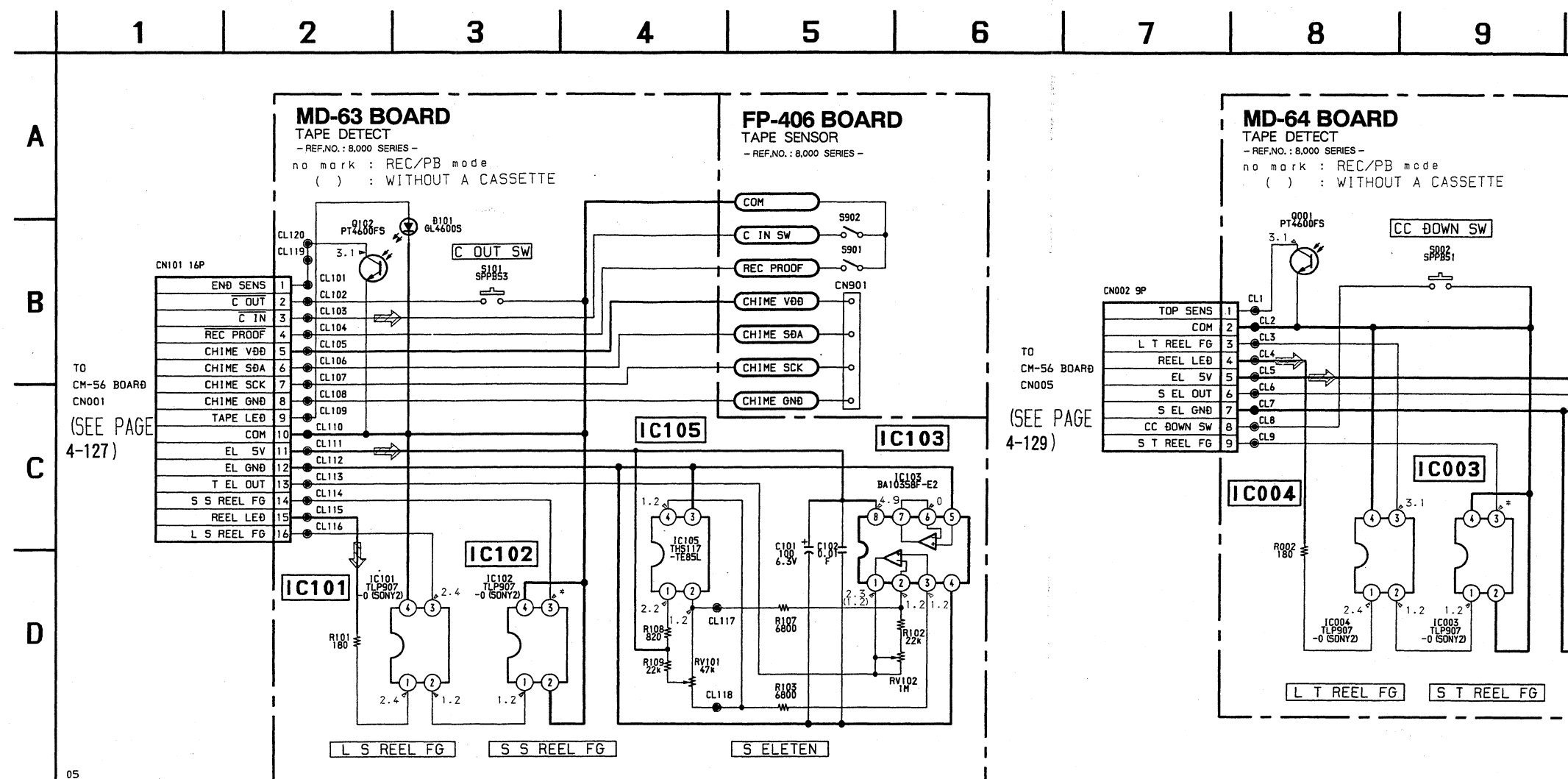


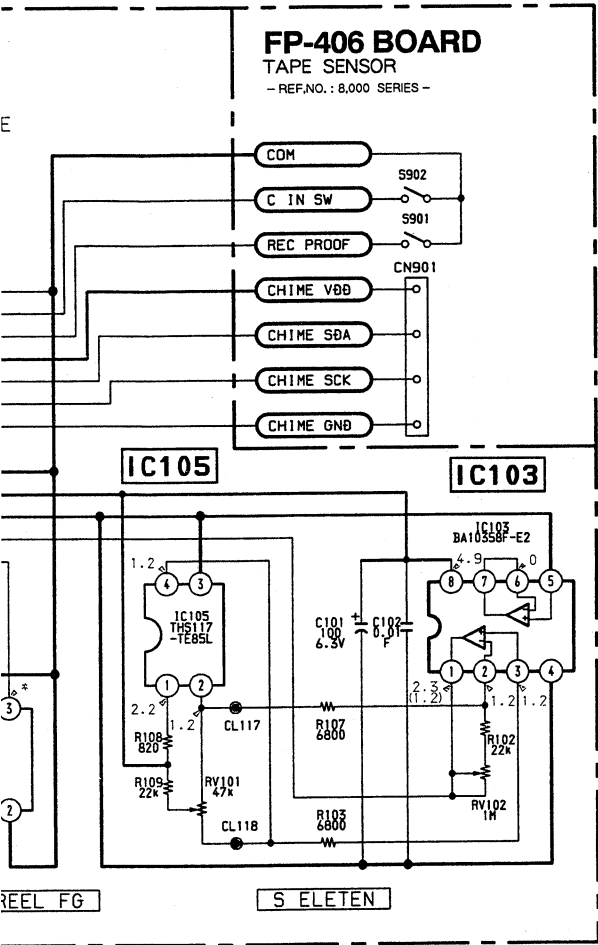
FP-406 BOARD



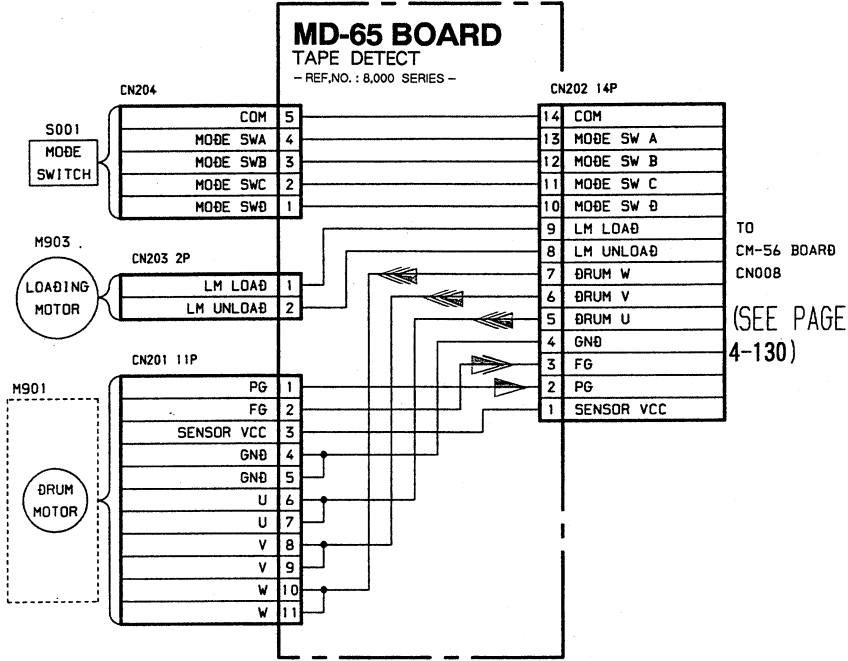
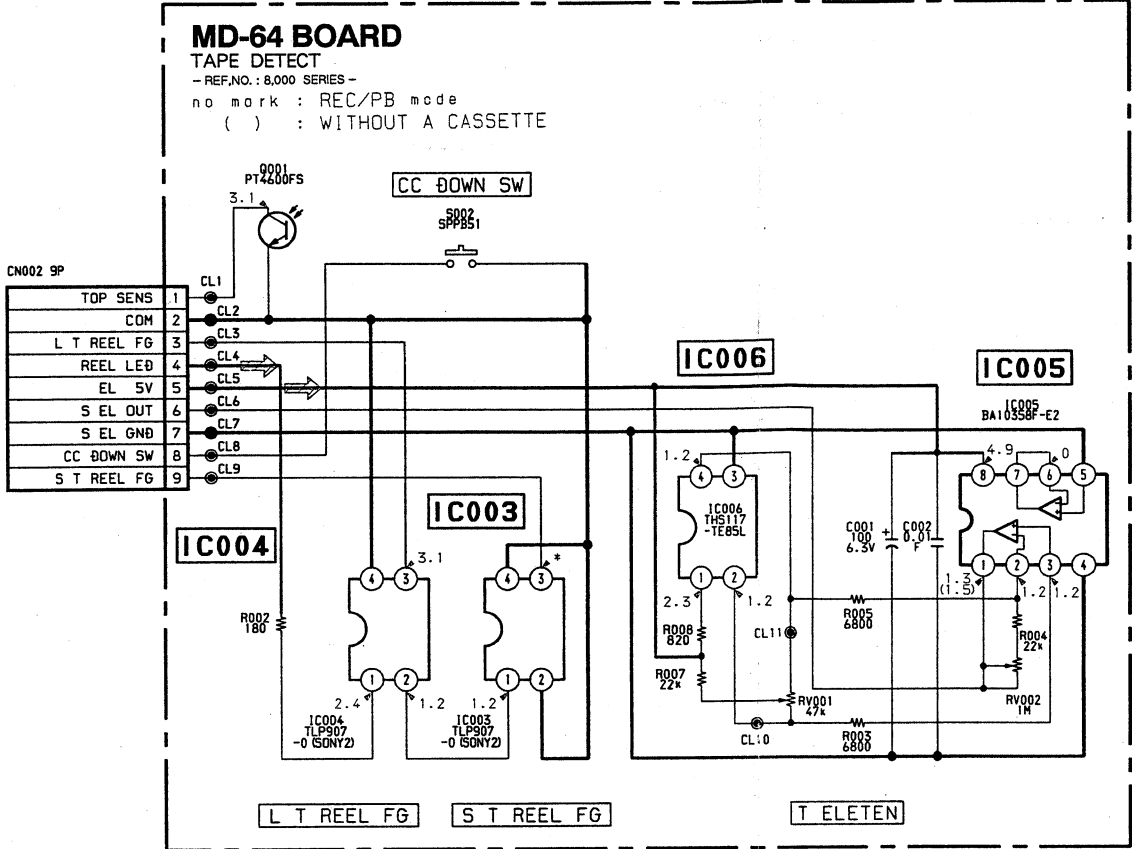


- For Printed Wiring Board.
- There are few cases that the part isn't mounted in this model is printed on this diagram.





TO  
CM-56 BOARD  
CN005  
(SEE PAGE  
4-129)



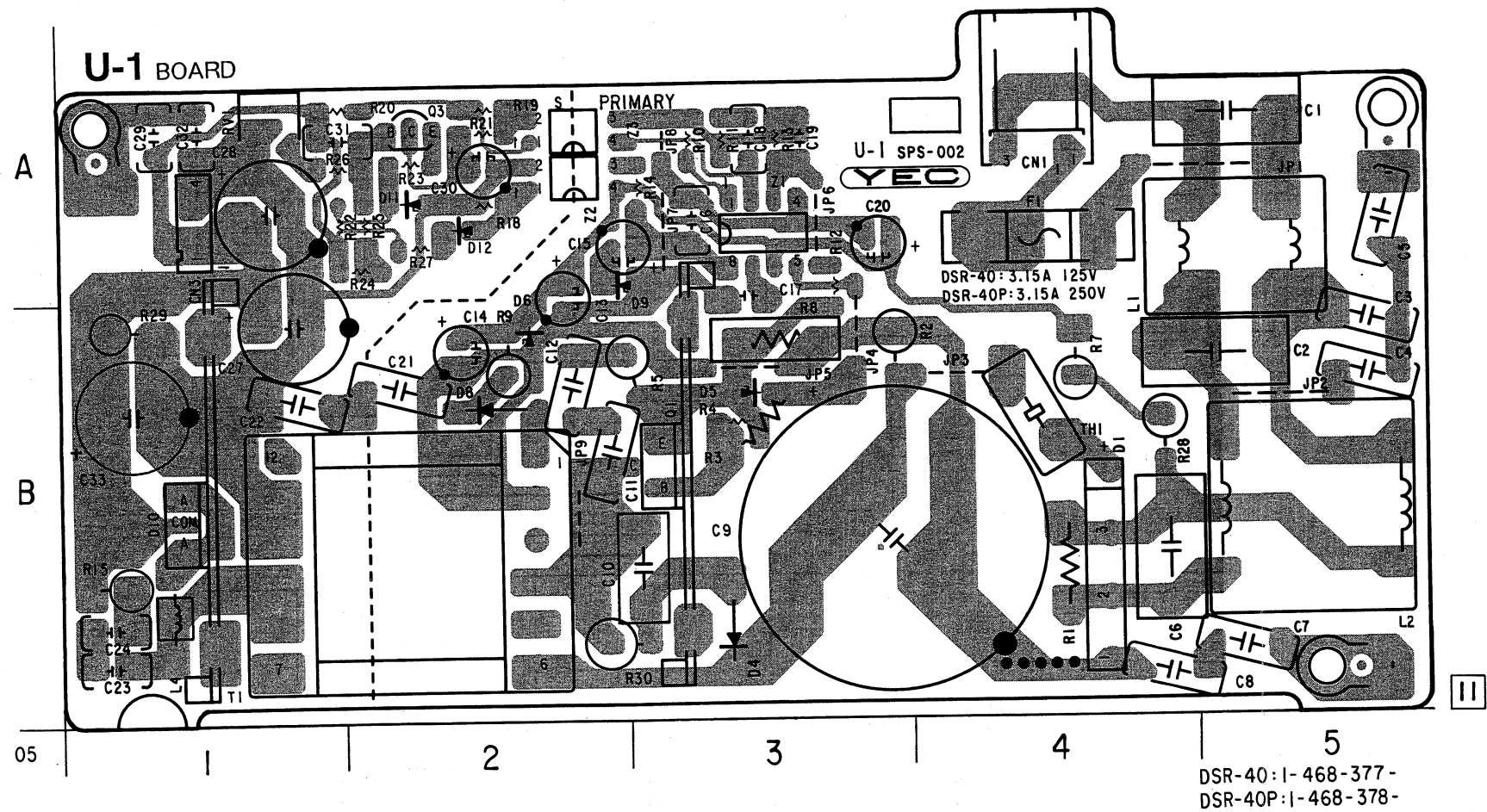
• SIGNAL PATH

	REC	REC/PB	PB
Drum speed servo		➤	
Drum phase servo		➤➤	
Drum servo(speed and phase)		➤➤➤	
Capstan speed servo			
Capstan phase servo			
Capstan servo(speed and phase)			
Ref. signal			

U-1 (POWER 1) PRINTED WIRING BOARD AND SCHEMATIC DIAGRAM

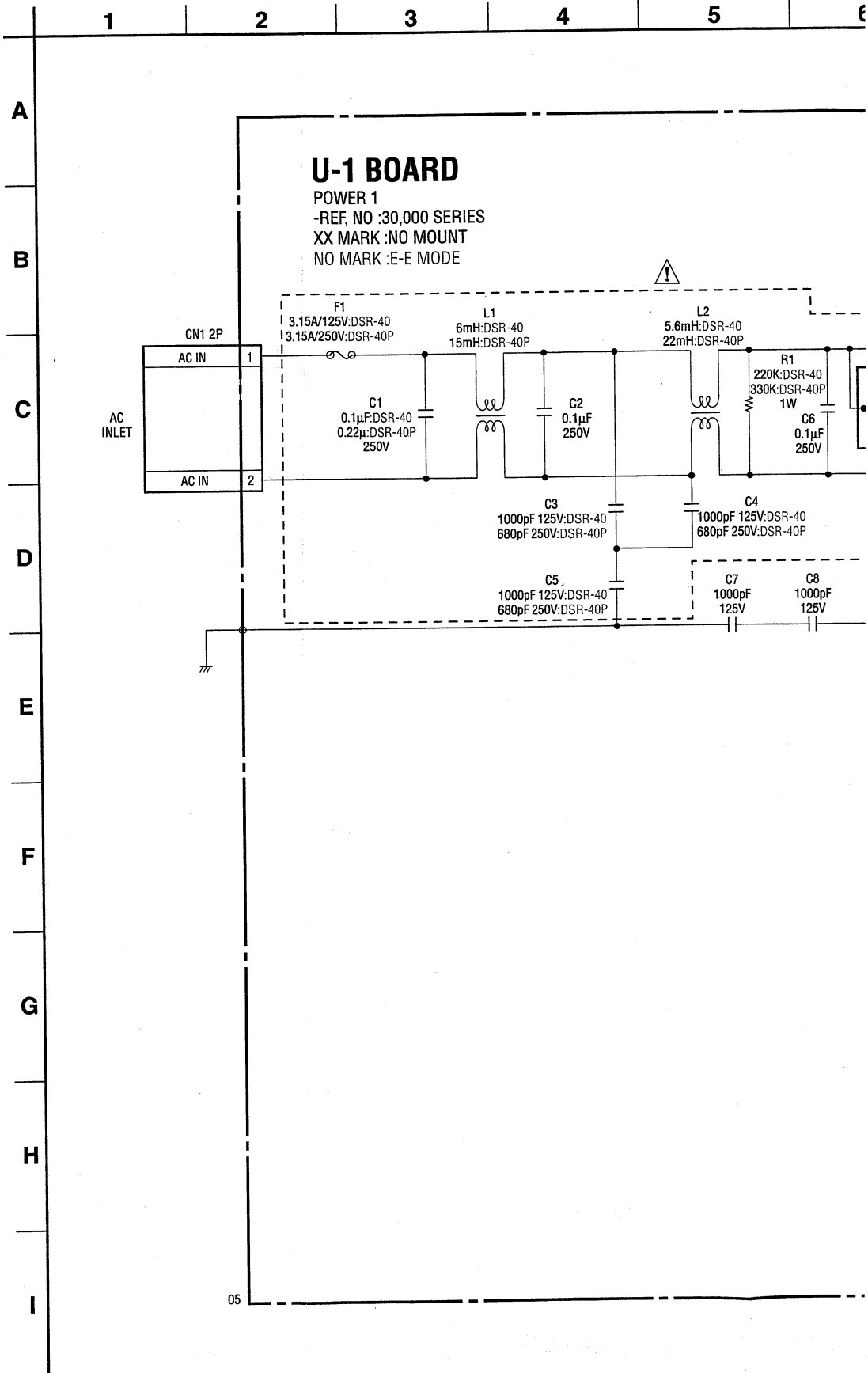
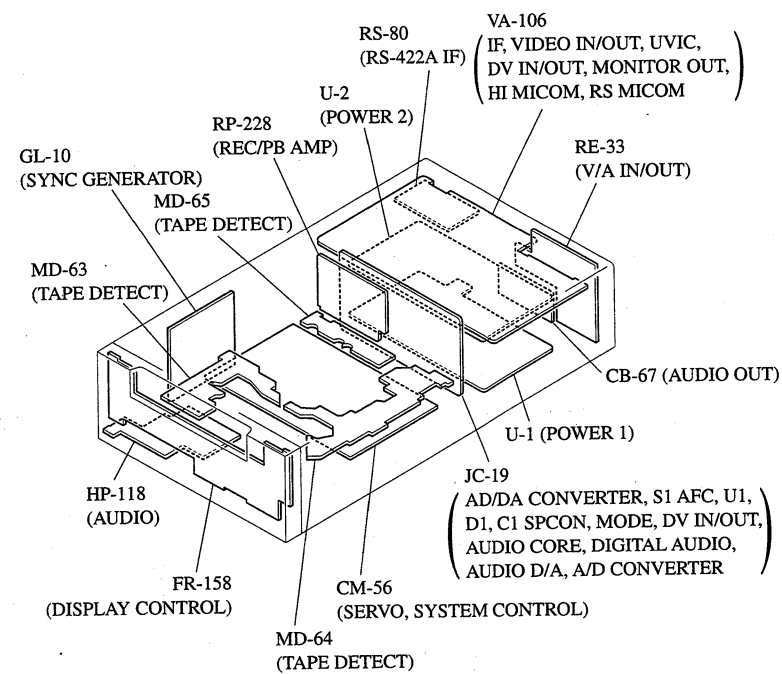
- Ref. No.: U-1 board; 30,000 series -

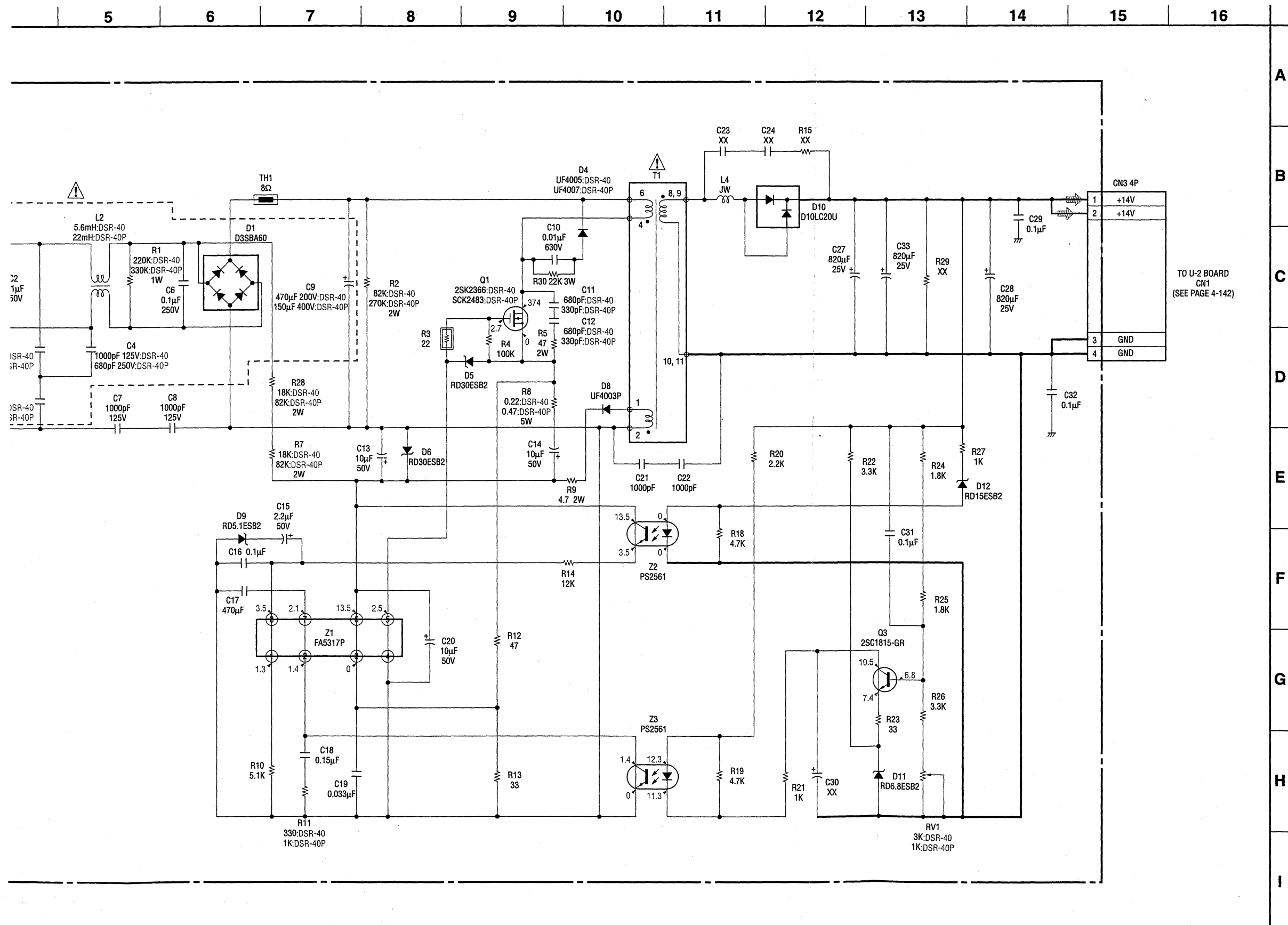
- For Printed Wiring Board.
- There are few cases that the part isn't mounted in this model is printed on this diagram.



U-1 BOARD

CN1	A-4
CN3	A-1
D1	B-4
D4	B-3
D5	B-3
D6	B-2
D8	B-2
D9	A-2
D10	B-1
D11	A-2
D12	A-2
Q1	B-3
Q3	A-2
Z1	A-3
Z2	A-2
Z3	A-2







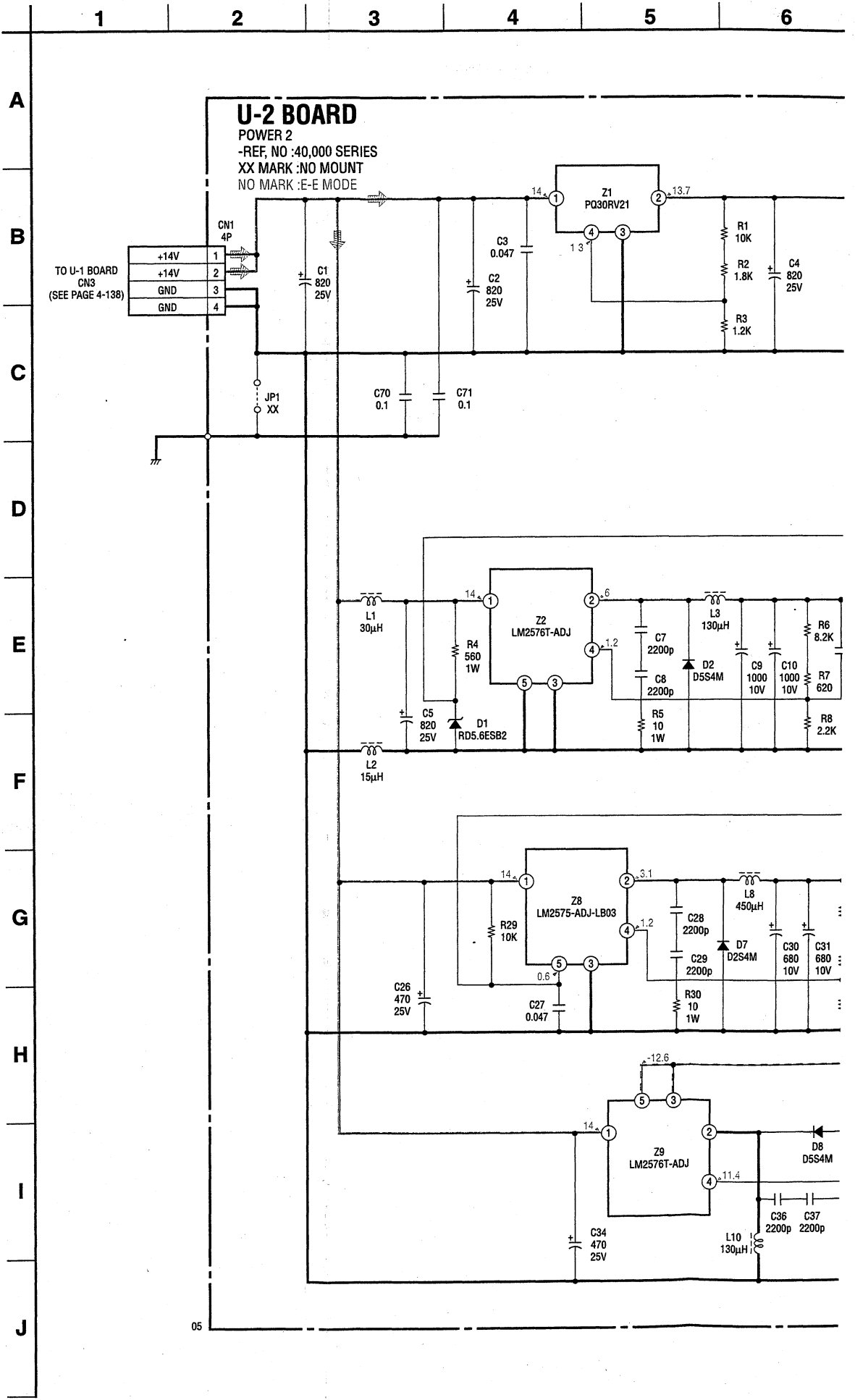
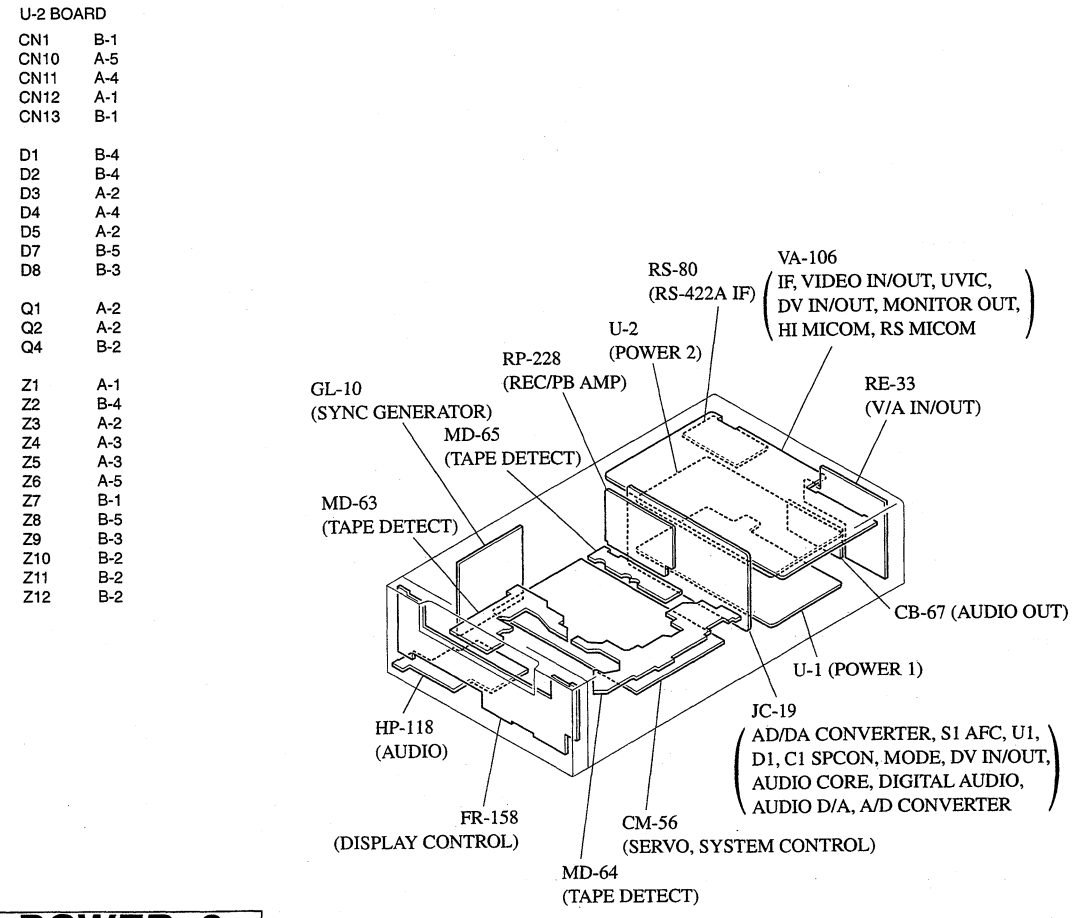
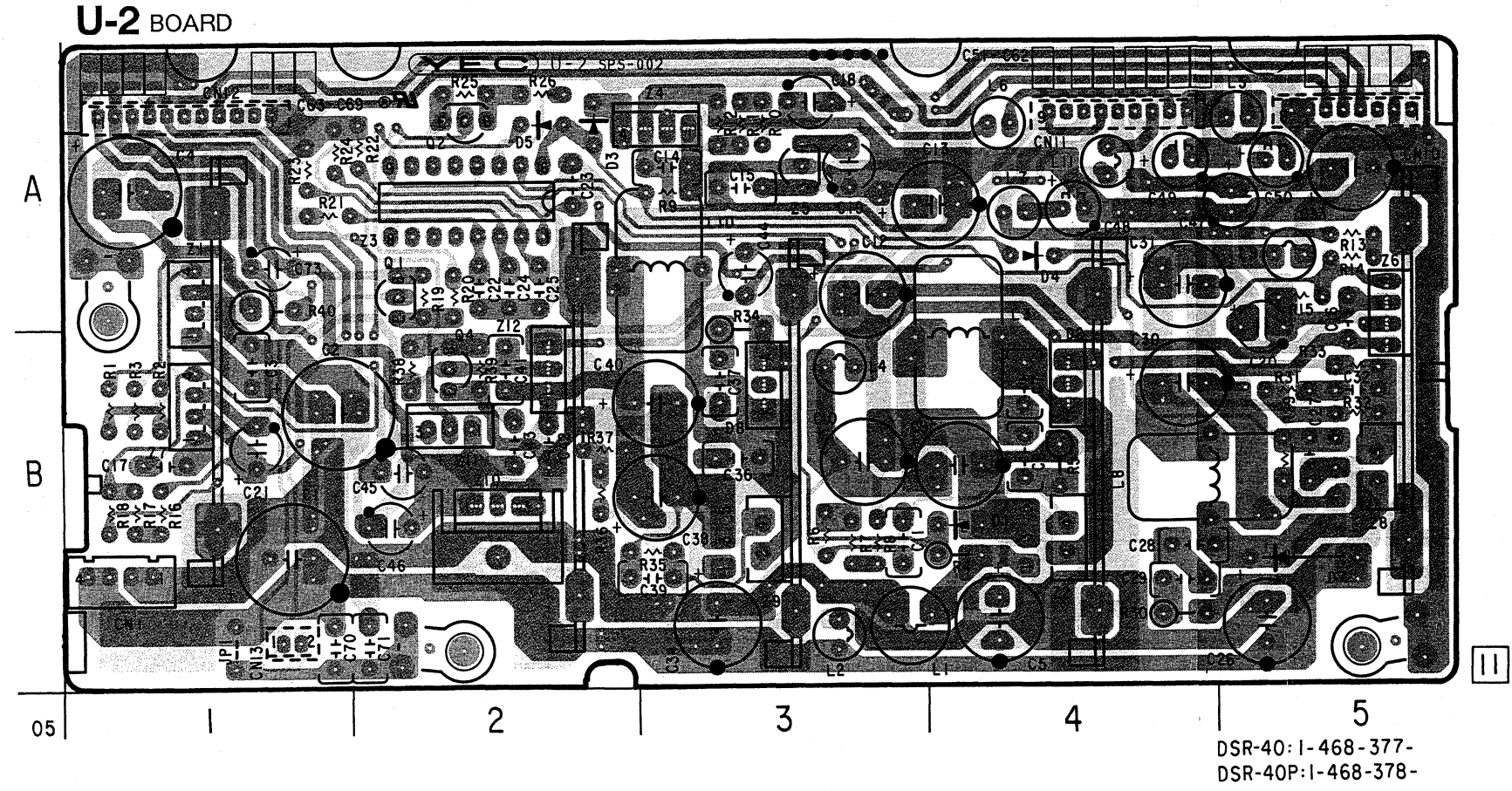
The components identified by mark  $\Delta$  or dotted line with mark  $\Delta$  are critical for safety. Replace only with part number specified.

Les composants identifiés par une marque  $\Delta$  sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

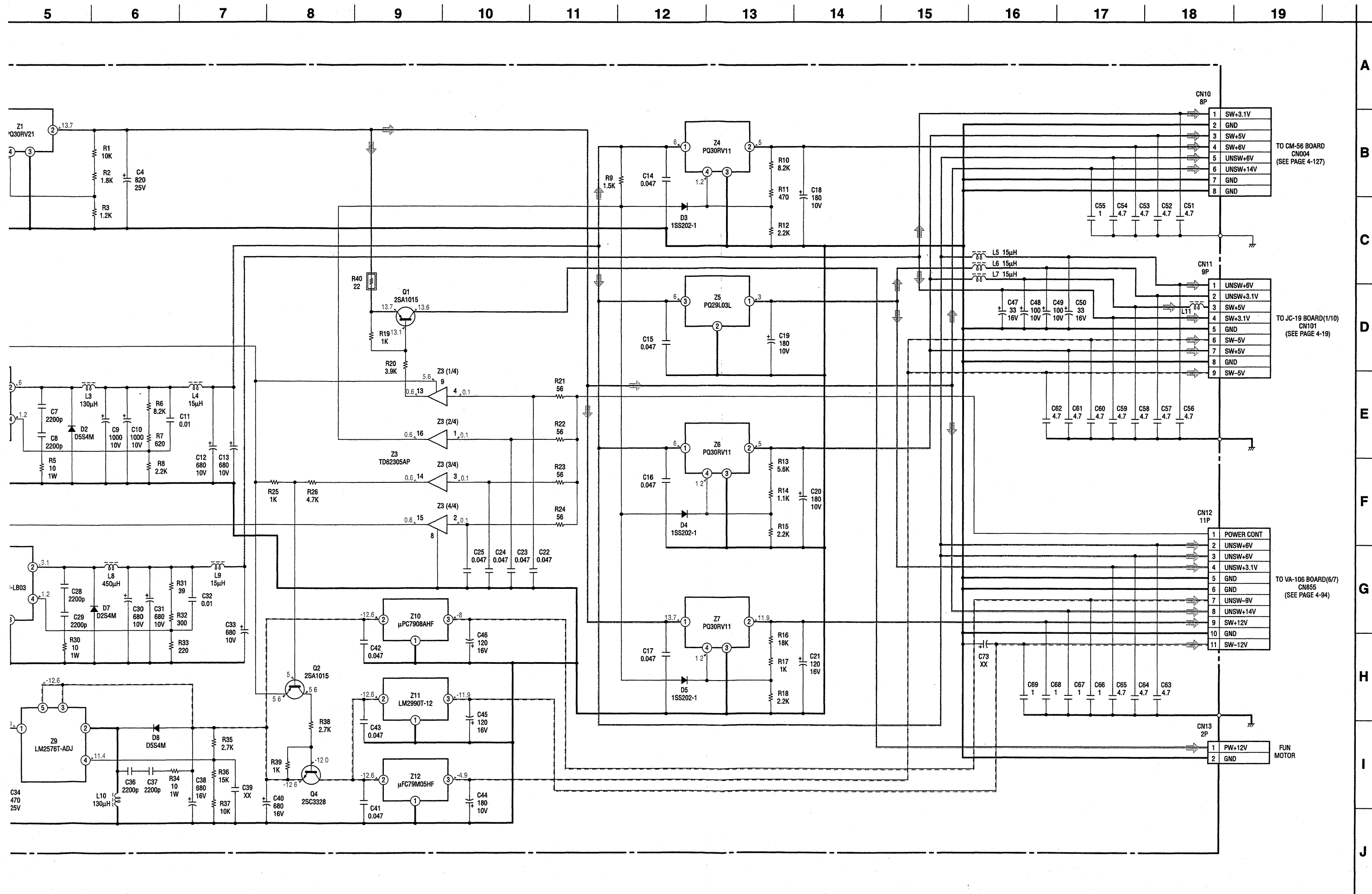
U-2 (POWER 2) PRINTED WIRING BOARD AND SCHEMATIC DIAGRAM

– Ref. No.: U-2 board; 40,000 series –

- For Printed Wiring Board.
-  : Pattern from the side which enables seeing.
-  : Pattern on the rear side.
- There are few cases that the part isn't mounted in this model is printed on this diagram.







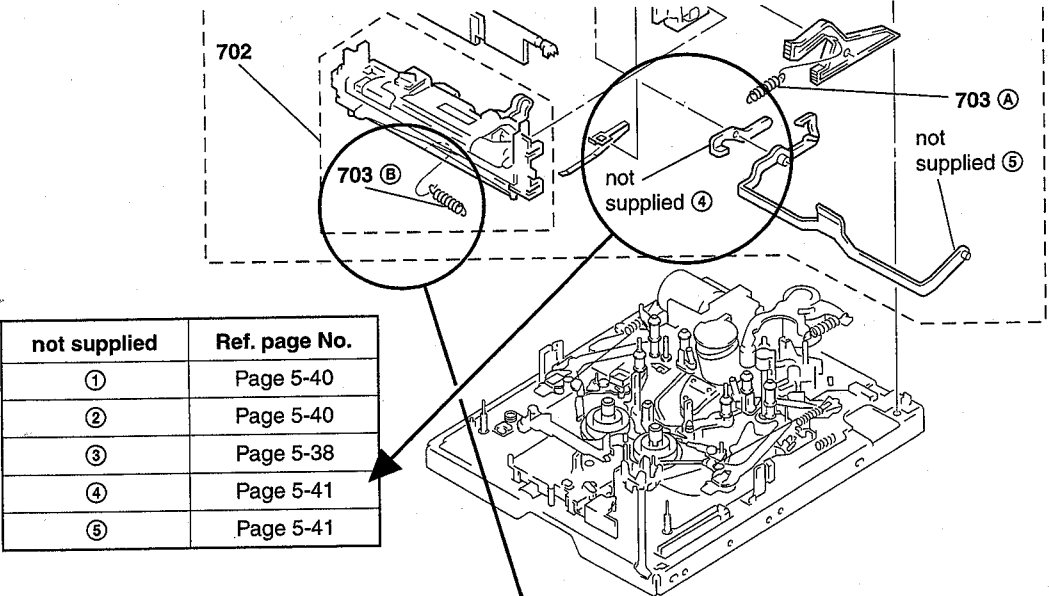
SECTION 5  
ADJUSTMENTS

5-1. MECHANICAL SECTION ADJUSTMENTS

5-1-1. INFORMATION

1-1. HOW TO SEARCH REFERENCE PAGES FOR REMOVAL

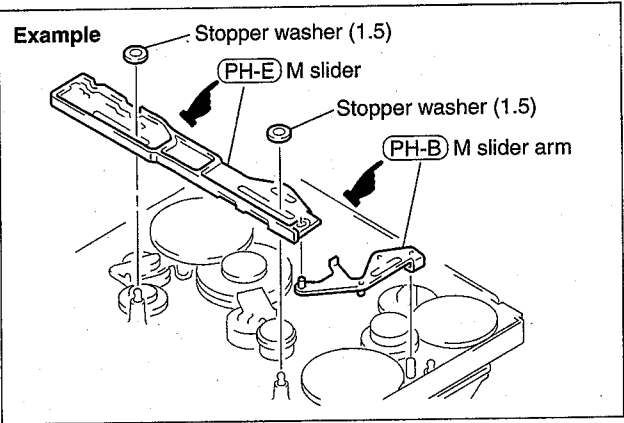
- To facilitate finding the required pages on how to removing and attaching parts, reference pages are listed in the remarks of the exploded views (6-4 to 6-9 pages) in the 5-1. Mechanical Section Adjustment.



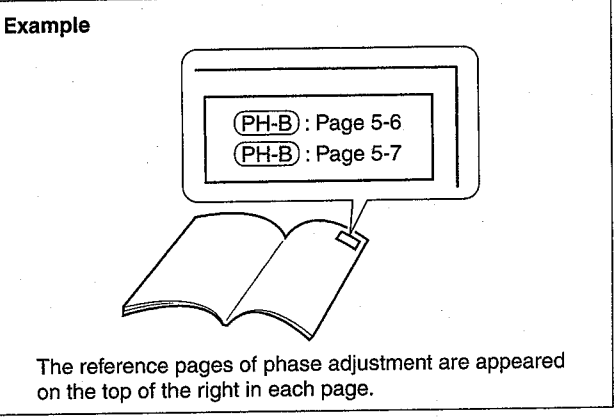
Ref. No.	Part No.	Description	Ref. Page No.	Ref. No.
* 701	A-7092-644-A	FL BLOCK ASSY	(5-2)	708
702	A-7092-647-A	SLOAT BLOCK ASSY, C	(5-41)	709
703	3-967-604-01	SPRING (DB), TENSION	(A):5-40/(B):5-41	710
704	3-967-655-01	DOOR, C	(5-40)	711
705	3-967-613-01	SPRING (HS), TENSION COIL	(5-41)	712

1-2. PHASE ADJUSTMENT MARK “(PH-)”

Numerous phase adjustments must be performed for removing and attaching parts (replacing parts) of the E mechanism. When removing and attaching parts, be sure to check the phase adjustment of corresponding parts. Parts that need phase adjustment are indicated with (PH-) mark. When replacing parts indicated with (PH-) mark, check their positions and phases so that the parts are attached smoothly in later.



In case of the above figure, refer to (B) and (E) of “5-1-3. PHASE ADJUSTMENTS”

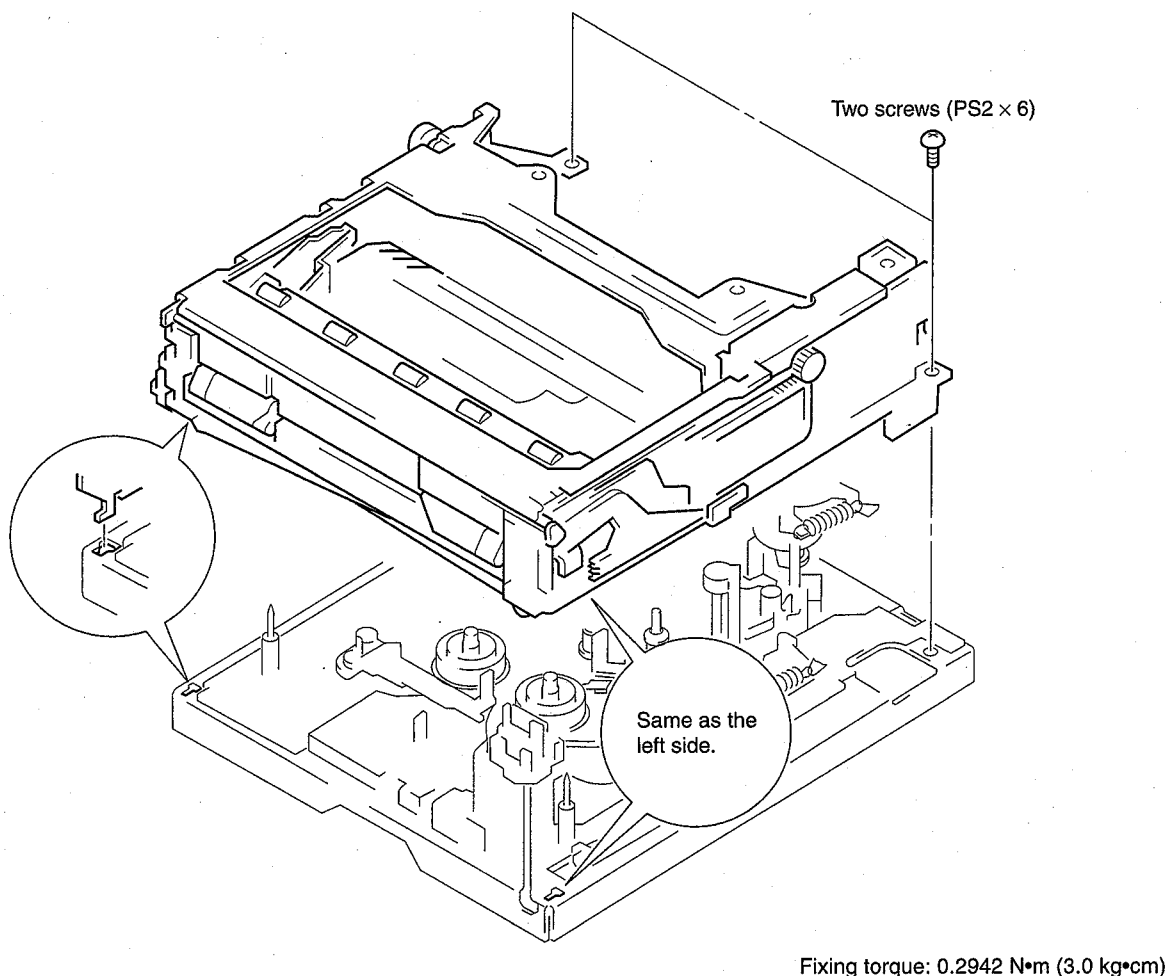


## 5-1-2. PREPARATION FOR MECHANICAL CHECK, ADJUSTMENT AND MAINTENANCE

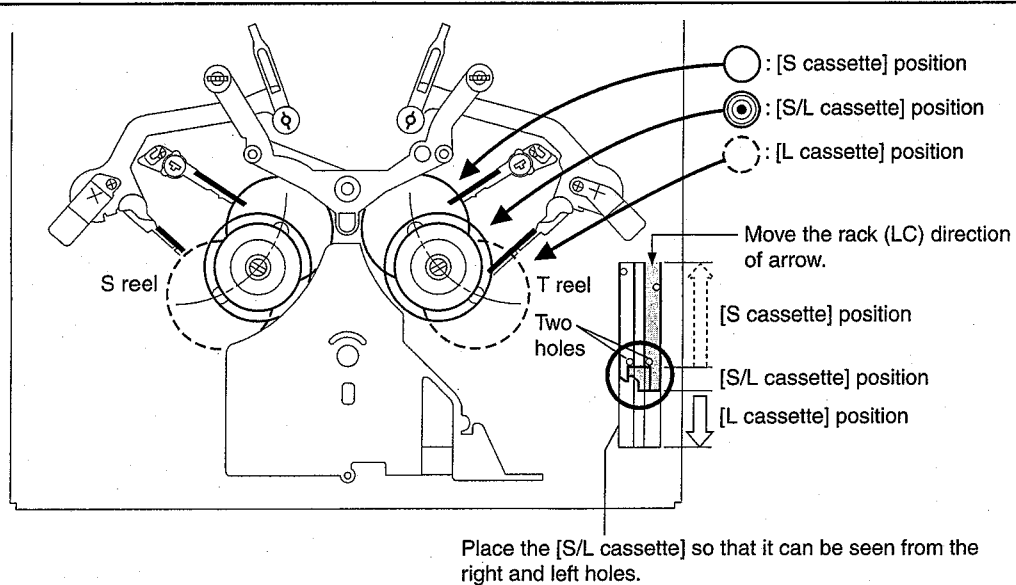
### 2-1. FL BLOCK ASSEMBLY

#### • Removing/Attaching

- For removal of mechanism deck, refer to 2-5. Removal of MD BLOCK ASSEMBLY.



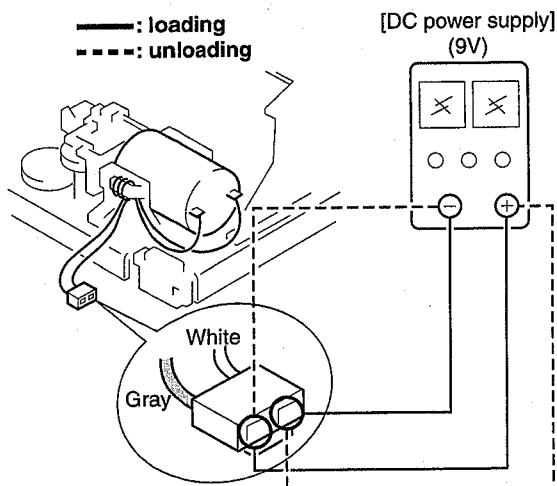
### 2-2. CASSETTE POSITIONS



## 2-3. LOADING/UNLOADING

### [Using the DC power supply] : With a loading motor

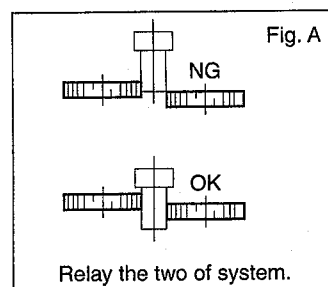
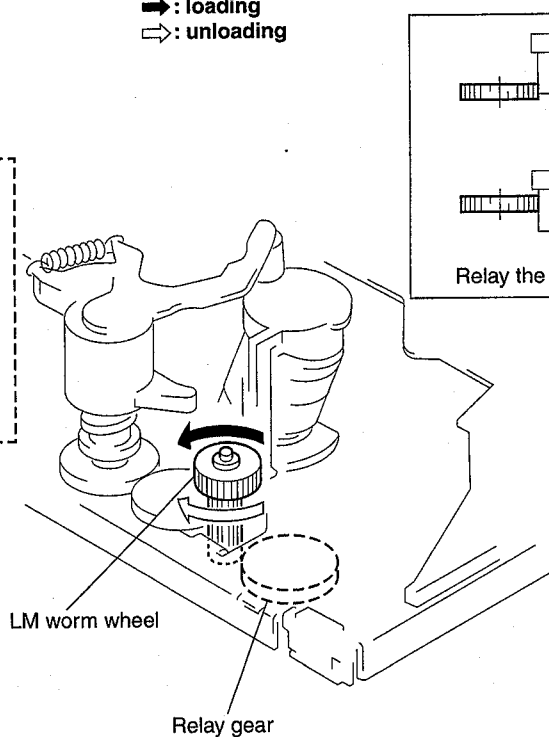
**Note:** Be sure to disconnect the connector of the loading motor before servicing.



### [Manual] : Without a loading motor

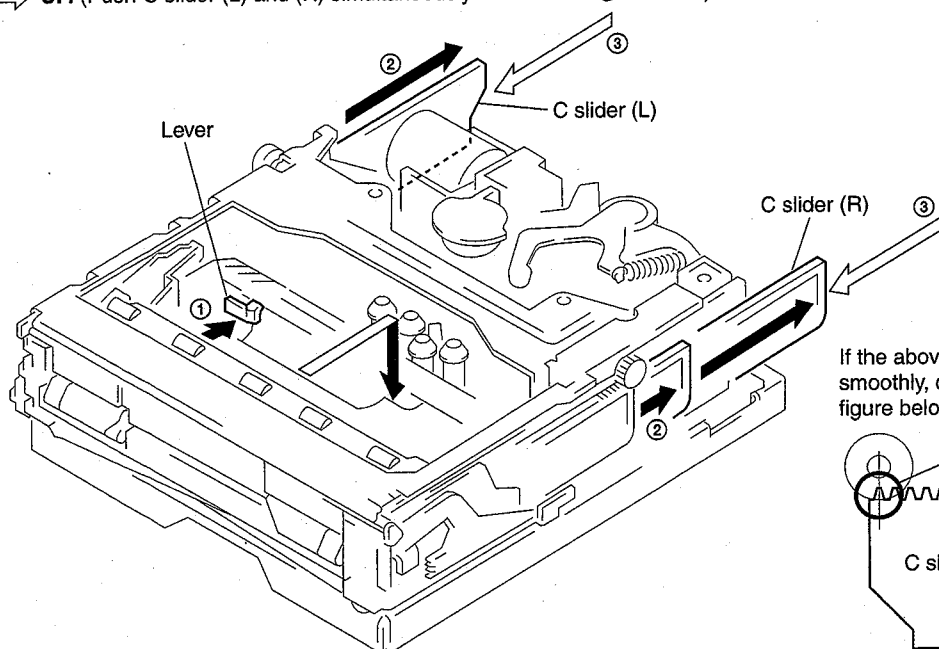
**Note:** If the LM worm wheel is rotated in the state shown in figure A (not engaged with the relay gear), the phases of the pinch drive system and the loading drive system will shift. (Refer to phase adjustment ④ on page 5-7 for details of phase adjustment)

➡ : loading  
➡ : unloading

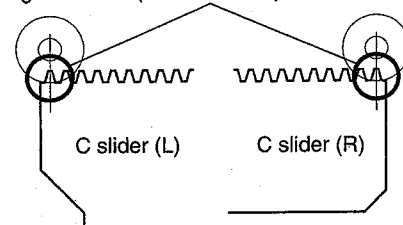


## 2-4. MANUAL UP/DOWN THE FL BLOCK

➡ **DOWN.** (While pushing the lever in the arrow ① direction, push C slider (L) and (R) simultaneously in the arrow ③ direction)  
➡ **UP.** (Push C slider (L) and (R) simultaneously in the arrow ③ direction)



If the above operation cannot be performed smoothly, check the phase as shown in the figure below. (Cassette compartment is UP)



## 2-5. SERVICE JIGS LIST

Ref. No.	Name	Part No.	Fixtur No.	Usage, Others Application, etc
J-1	Cleaning fluid	Y-2031-001-0		For cleaning drum assembly and tape guide
J-2	Wiping cloth	7-741-900-53		For cleaning drum assembly
J-3	Super fine applicator (Made by NIPPON APPLICATOR (P752D))			For cleaning tape guide
J-4	Mirror (Small oval type)	J-6080-840-A	GD-2038	Tape path
J-5	Tracking tape (XH2-1AST) Standard cassette	8-967-999-01		Tape path (for tape top checking)
	Tracking tape (XH2-1ASE) Standard cassette	8-967-999-06		Tape path (for tape end checking)
	Tracking tape (XH2-1A1) Mini cassette	8-967-999-03		Tape path (for checking)
J-6	Mini DV torque cassette	J-6082-360-A		For adjusting FWD/RVS back tension
J-7	Cassette standard plate (D/E mechanism)	J-6082-330-A		For adjusting tape guide and reel table
J-8	Reel standard plate (D/E mechanism)	J-6082-331-A		For adjusting reel table
J-9	TG2/7 preset plate	J-6082-358-A		For adjusting tape guide
J-10	Screwdriver for tape path	J-6082-026-A		For adjusting tape guide
J-11	Adjusting remote commander (RM-95 remodeled partly) Note 1	J-6082-053-B		Tape path
J-12	Torque driver	J-9049-330-A		Mechanism check and replacement
J-13	Tension regulator adjustment board	J-6082-359-A		Electric tension regulator adjustment
J-14	CPC 8-jig	J-6082-388-A		Tape path

Other equipment used

- Oscilloscope
- DC power supply
- Digital voltage meter



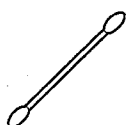
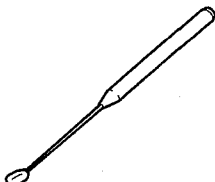
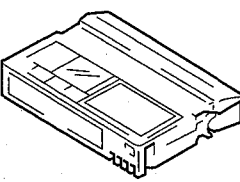
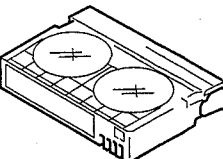
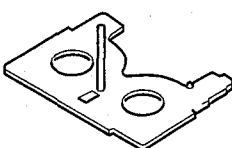

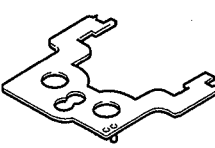
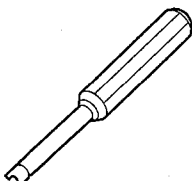

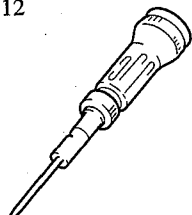
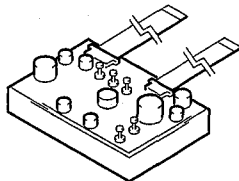
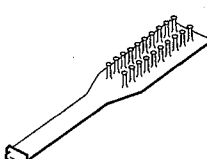
**Note 1:** If the micro processor IC in the adjusting remote commander is not the new micro processor (UPD7503G-C56-12), the pages cannot be switched.

In this case, replace with the new micro processor (8-759-148-35).

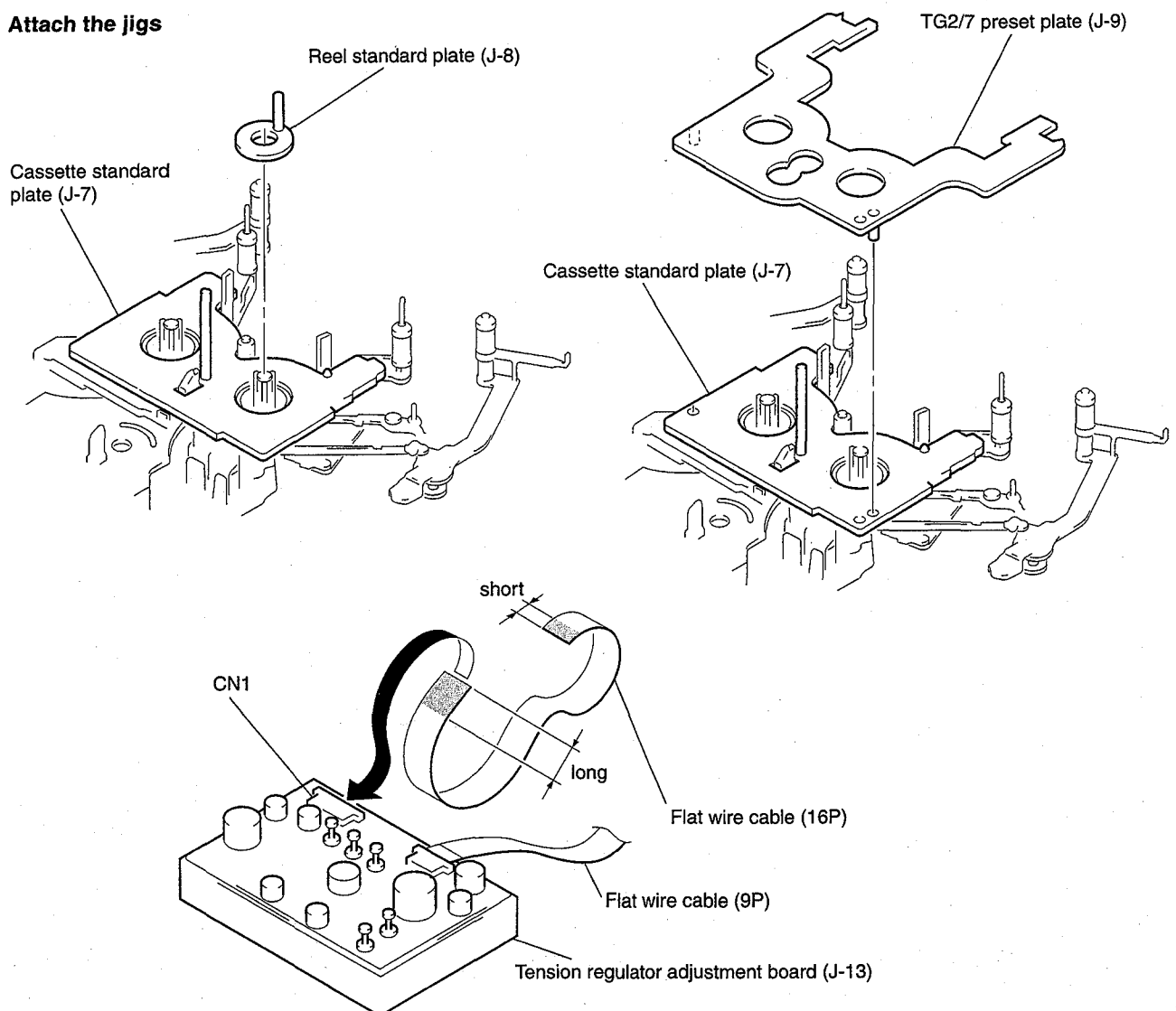
Tape path:

1. Make a checking and adjustment at the tape top using the XH1-1AST tape.
2. Then, make a checking with the XH2-1ASE (for tape end) and XH2-1A1 (Mini cassette for tape top and end).
3. Again make a checking with the XH2-1AST.



J-1 	J-2 	J-3 	J-4 	J-5 
J-6 	J-7 	J-8 	J-9 	J-10 
J-11 	J-12 	J-13 	J-14 	

• **Attach the jigs**



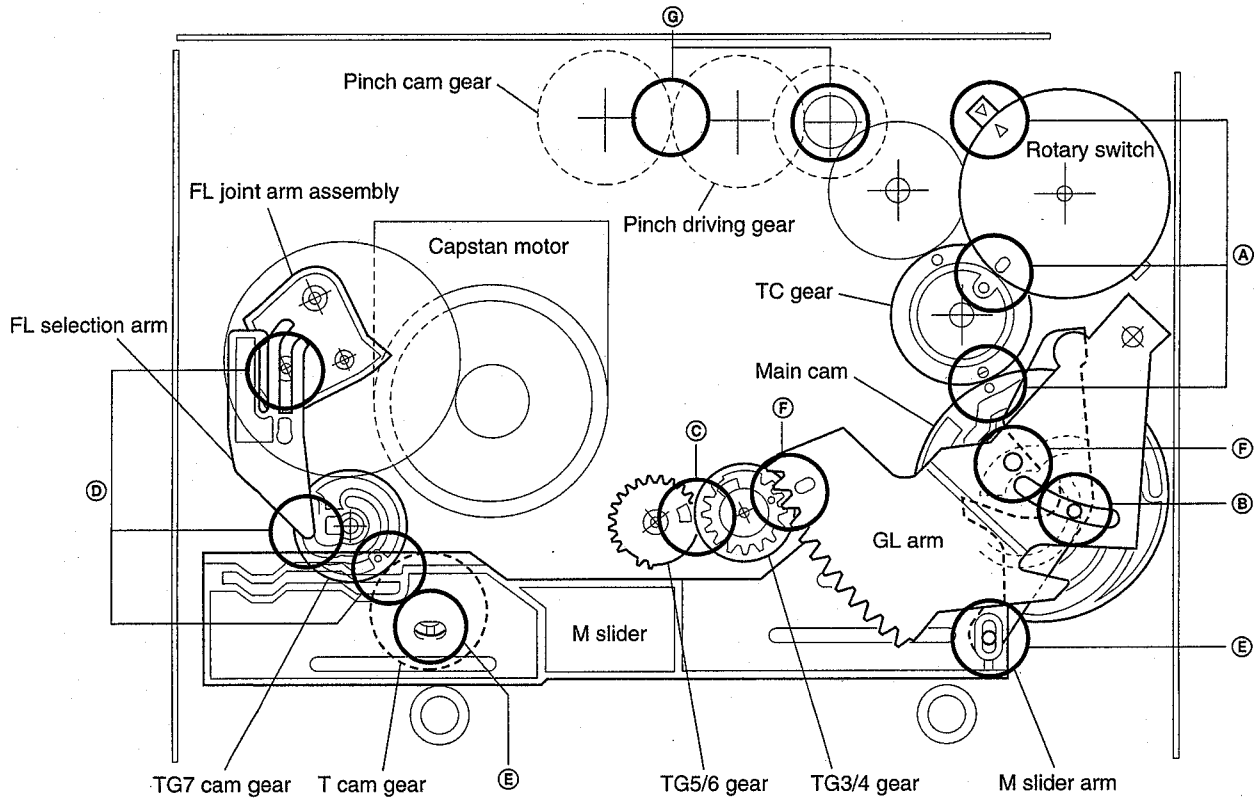
### 5-1-3. PHASE ADJUSTMENTS

- This section classifies the phase adjustment into three blocks for clarity. The attaching order of each part is not described here. For details of the attaching order, refer to “5-1-5. MECHANISM SECTION CHECKS AND REPLACEMENTS”.

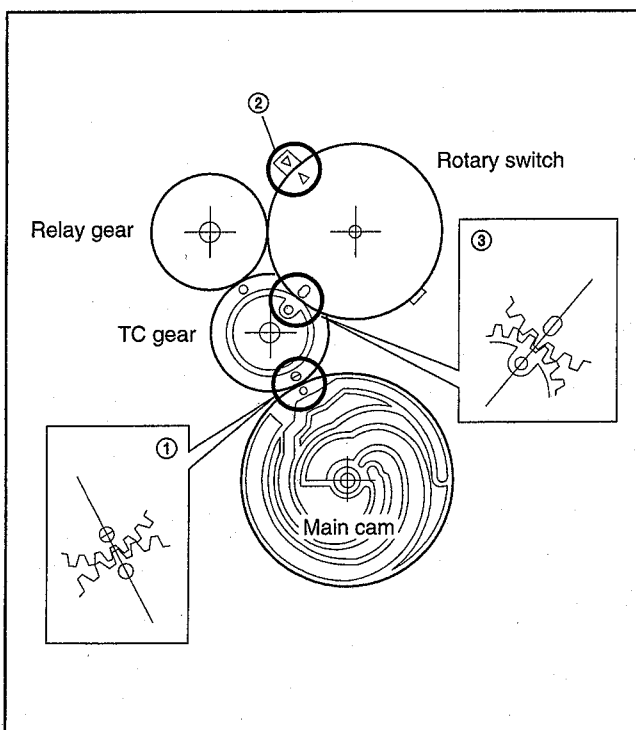
#### 3-1. PHASE ADJUSTMENT (Loading/Unloading Driving Section)

**Note 1:** Adjust it at the **UNLOADING** position unless otherwise specified.

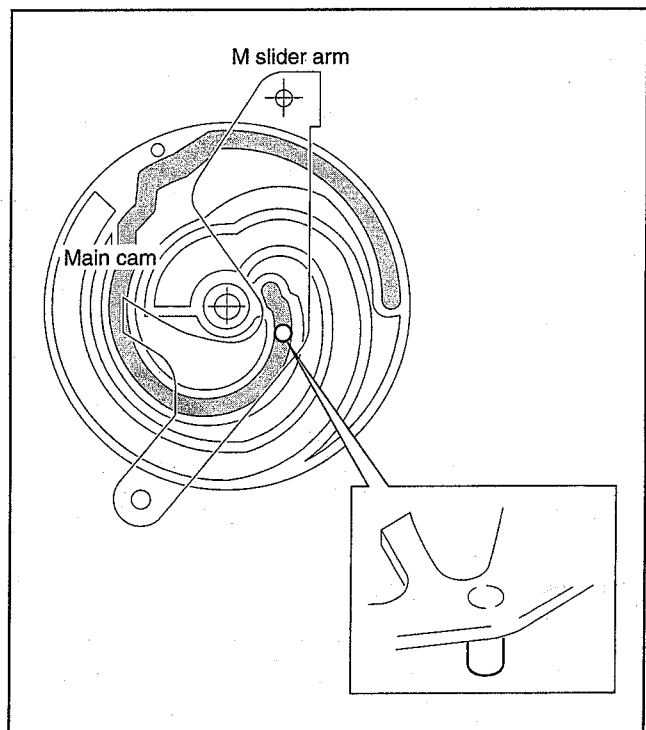
**Note 2:** ① to ③ shown below are the orders for the phase adjustment.



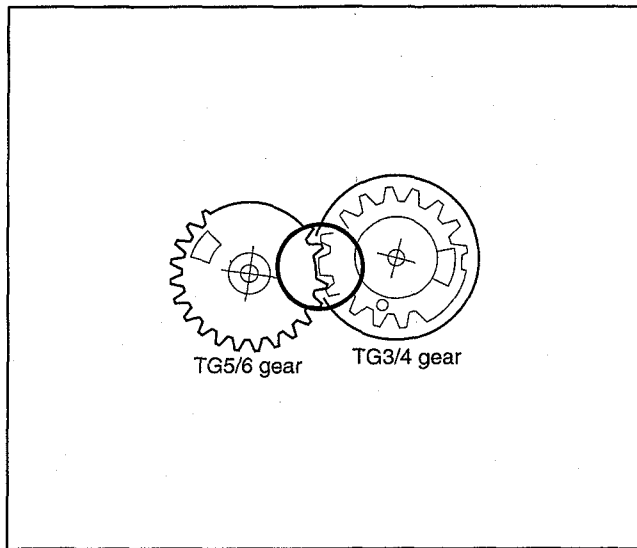
#### PHASE ADJUSTMENT ①



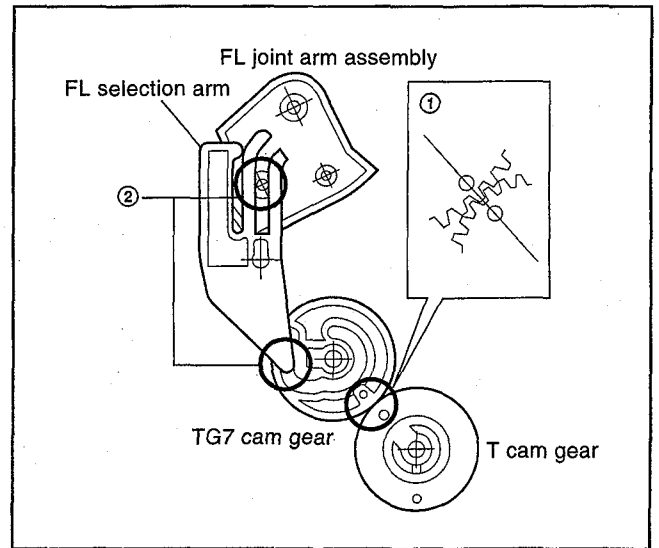
#### PHASE ADJUSTMENT ②



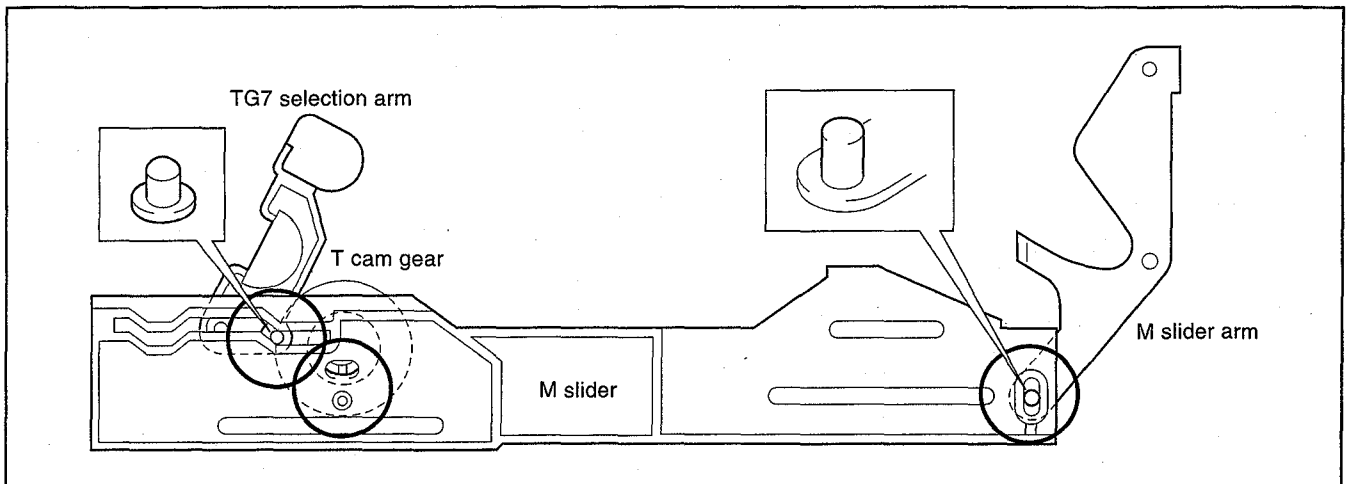
### PHASE ADJUSTMENT ㉓



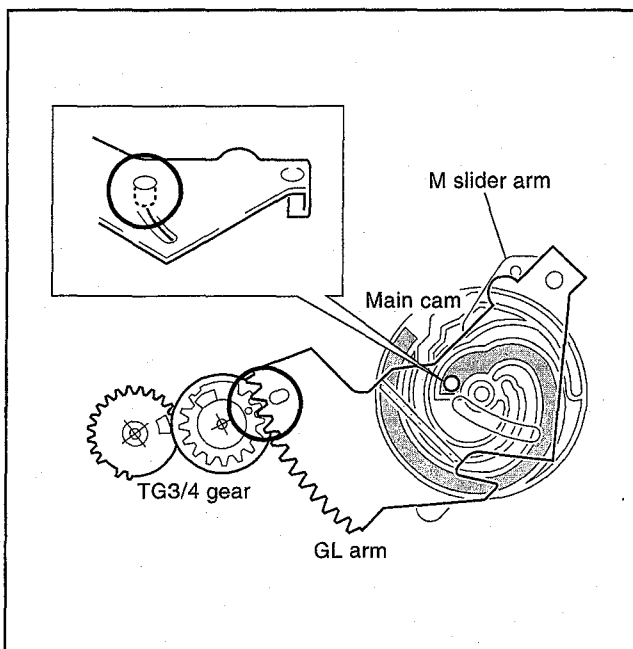
### PHASE ADJUSTMENT ㉔



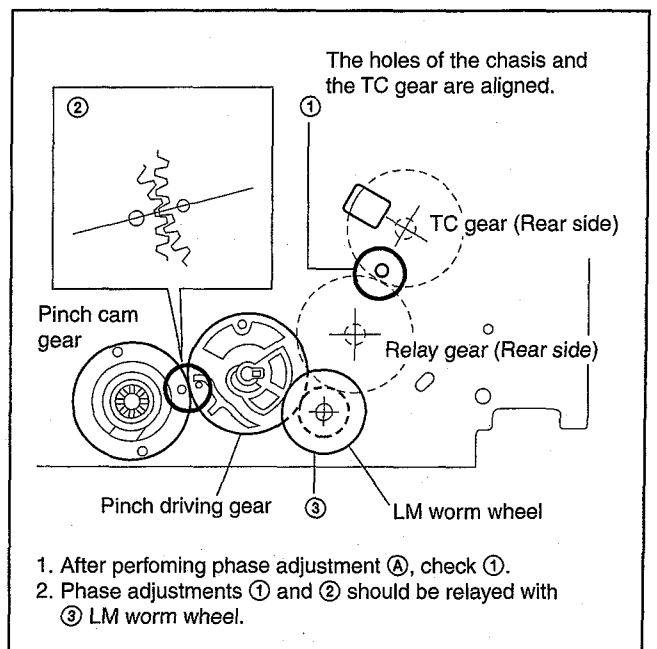
### PHASE ADJUSTMENT ㉕



### PHASE ADJUSTMENT ㉖



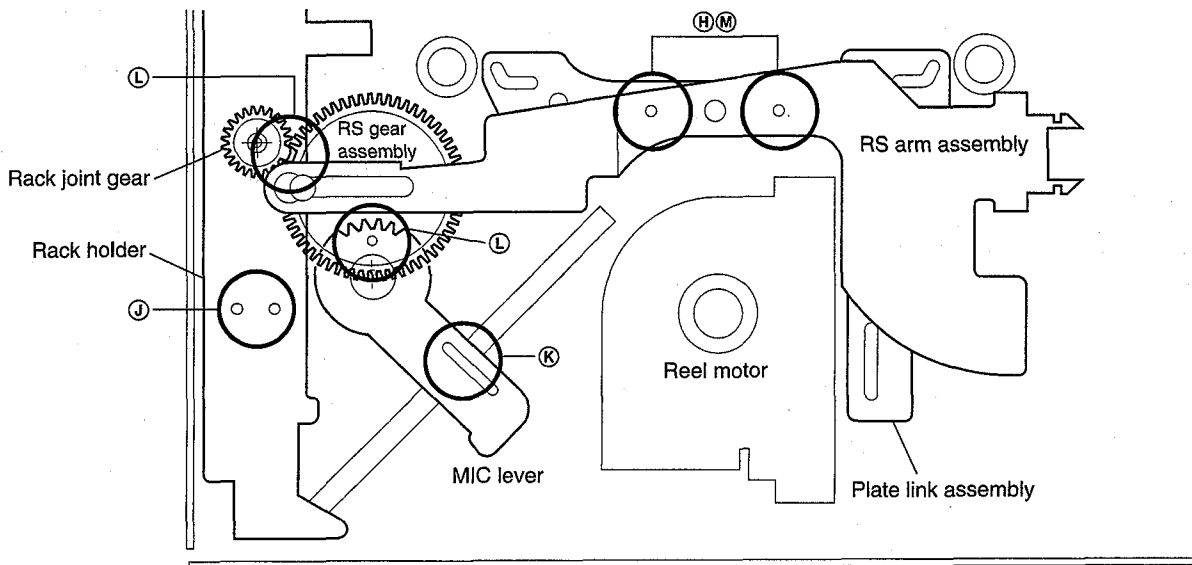
### PHASE ADJUSTMENT ㉗



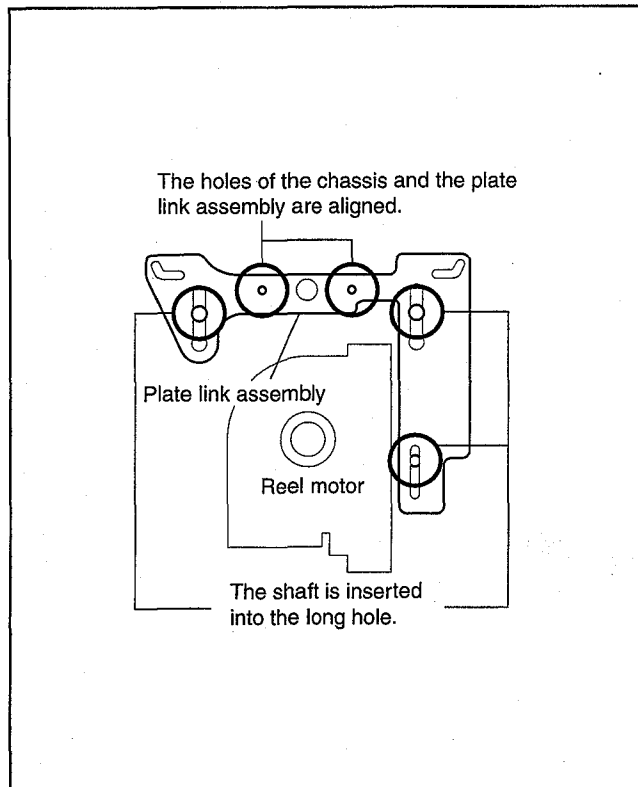
### 3-2. PHASE ADJUSTMENT (S/L Cassette Selection Section)

**Note 1:** Adjust if at the **(S/L cassette)** position unless otherwise specified.

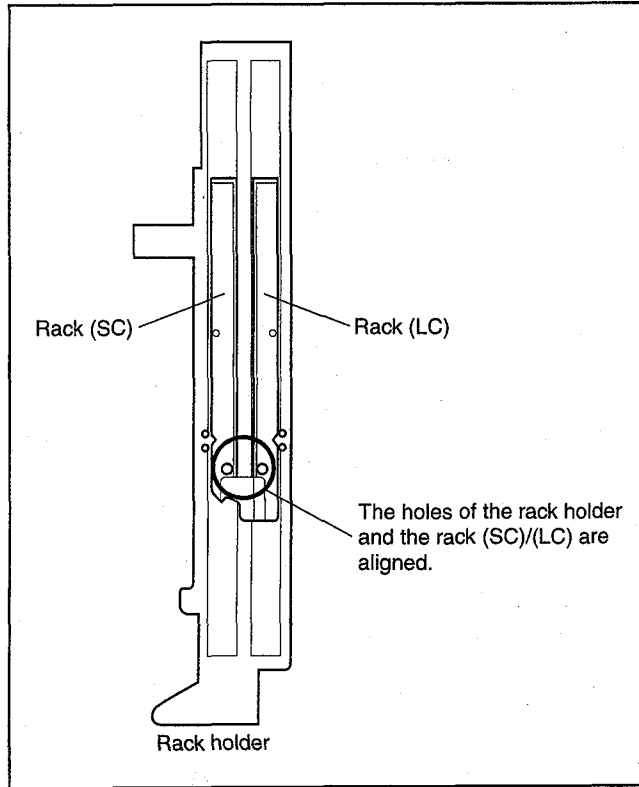
**Note 2:** (H) to (M) shown below are the orders for the phase adjustment.



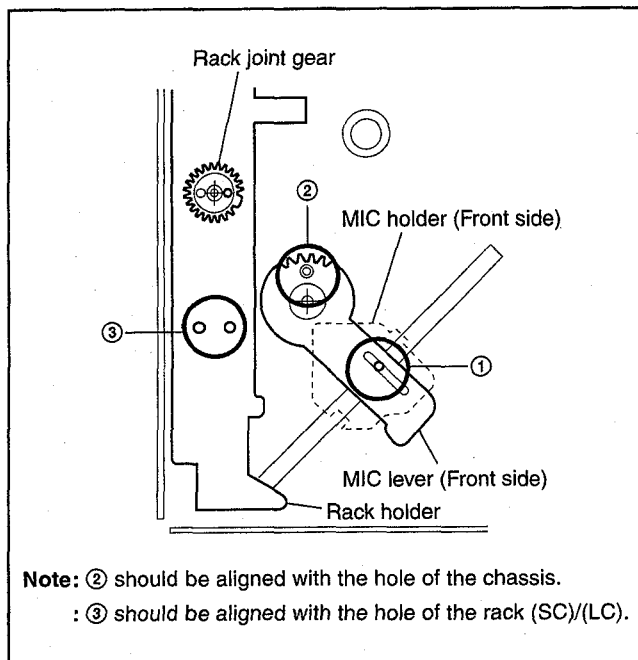
#### PHASE ADJUSTMENT (H)



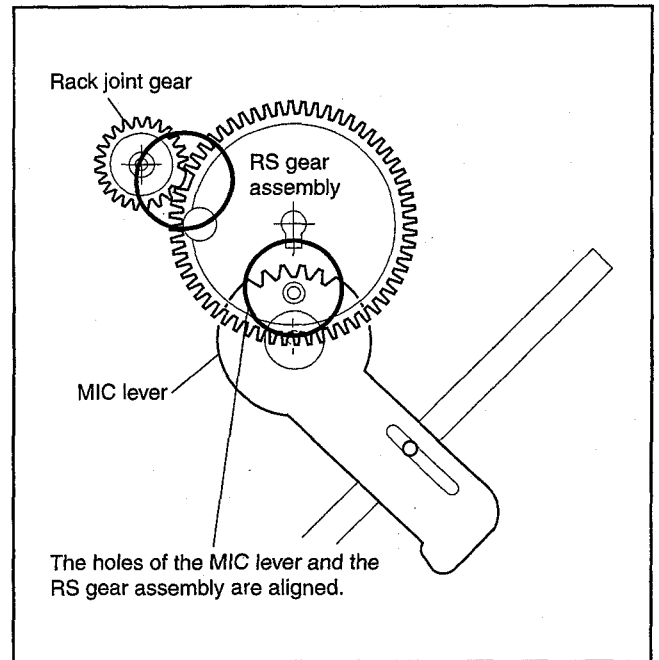
#### PHASE ADJUSTMENT (J)



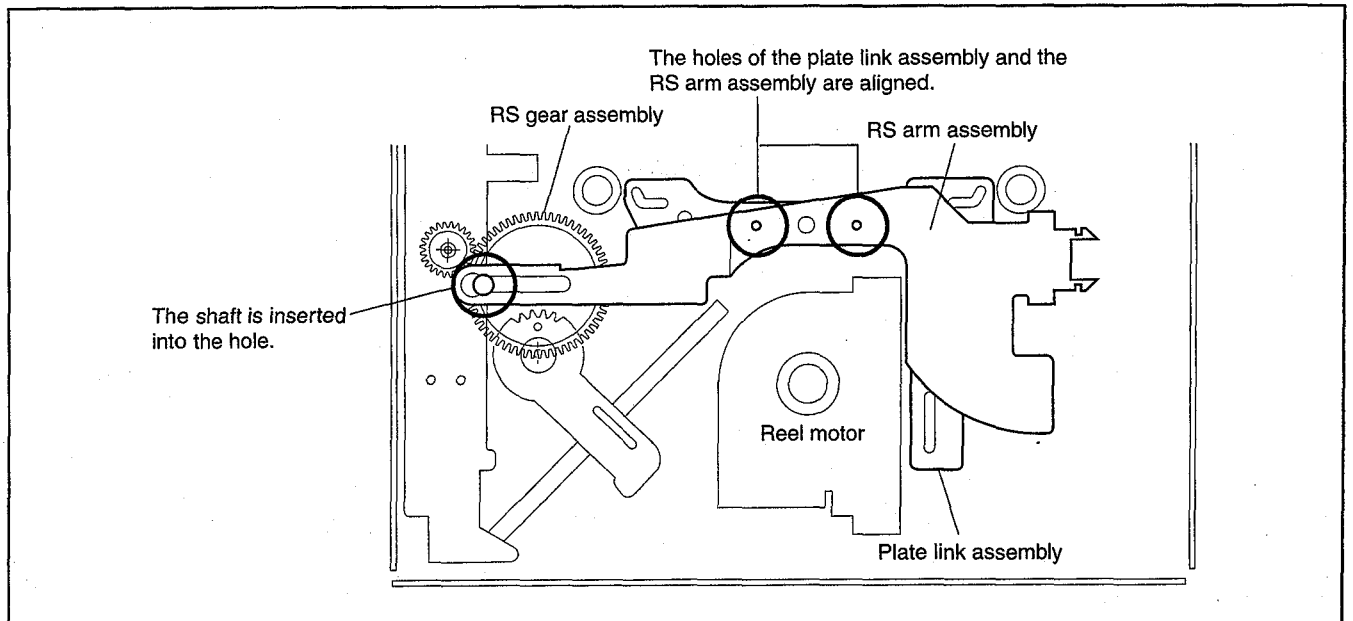
### PHASE ADJUSTMENT ㊦



### PHASE ADJUSTMENT ㊧



### PHASE ADJUSTMENT ㊨

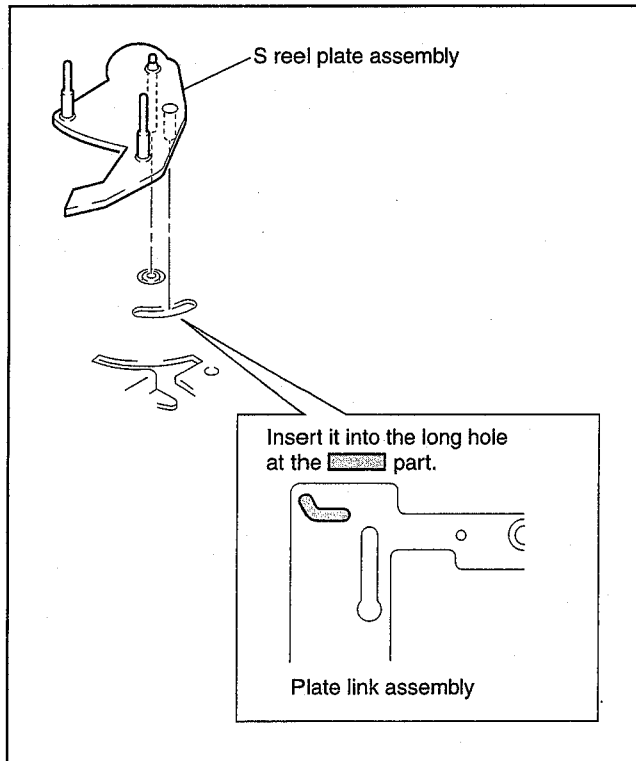




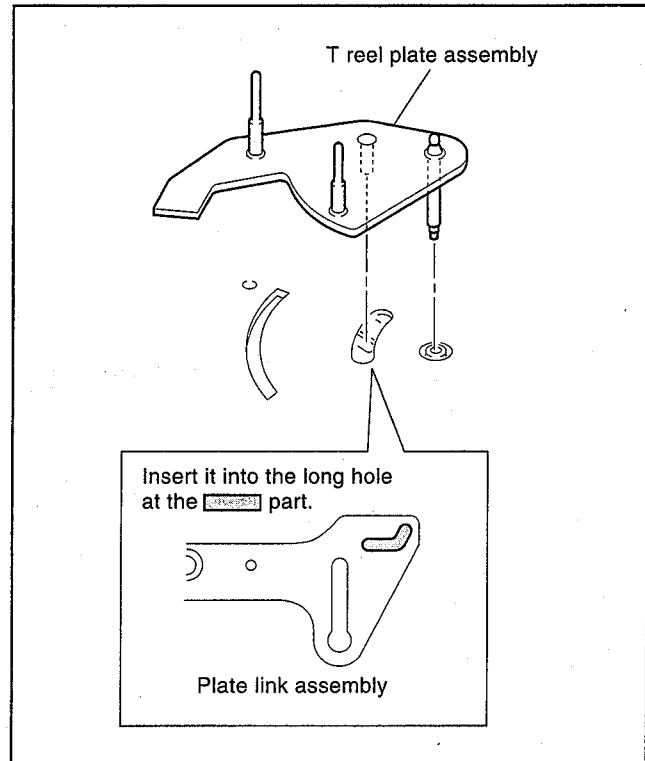
### 3-3. PHASE ADJUSTMENT (Mechanism Chassis Upper Surface Parts)

**Note:** Adjust if at the **(UNLOADING)** position unless otherwise specified.

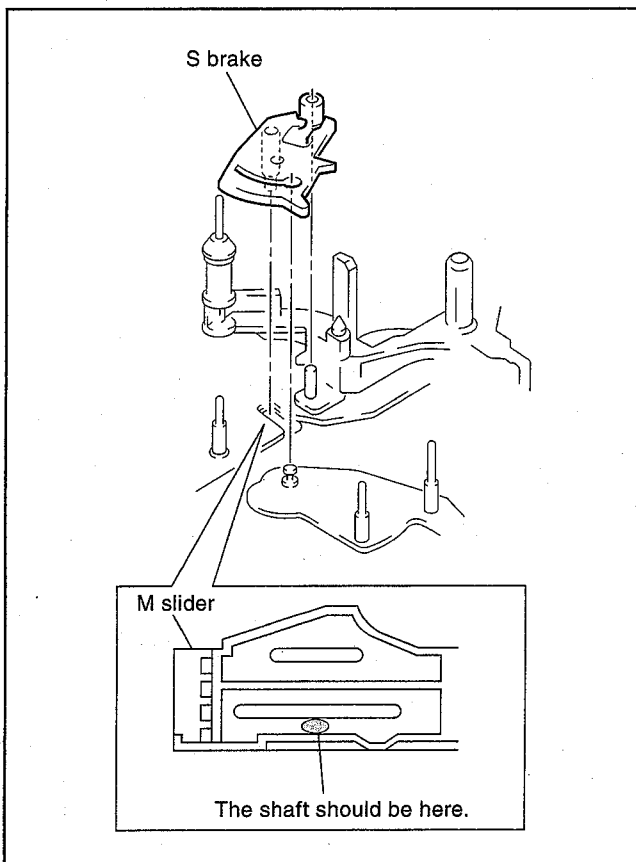
#### PHASE ADJUSTMENT ㉒



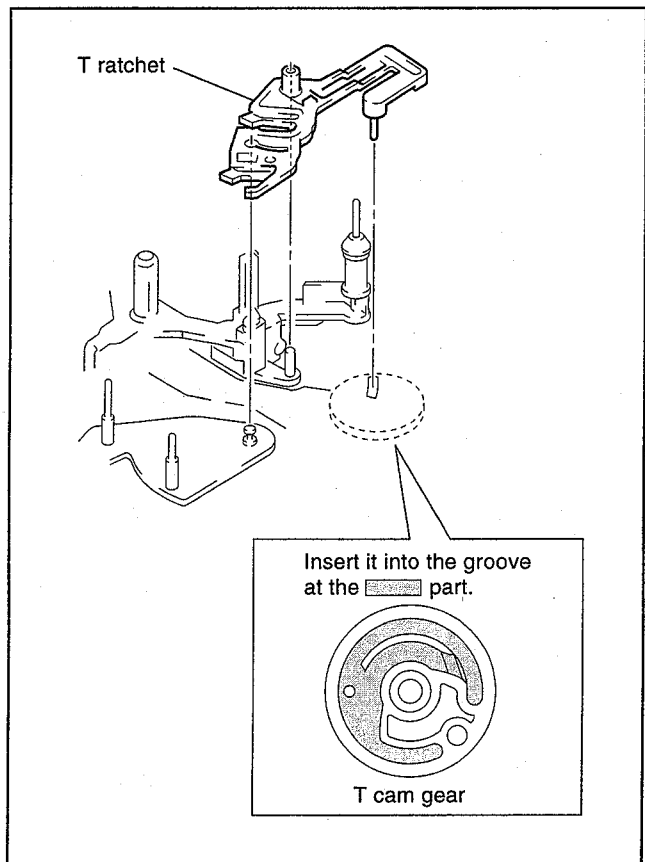
#### PHASE ADJUSTMENT ㉓



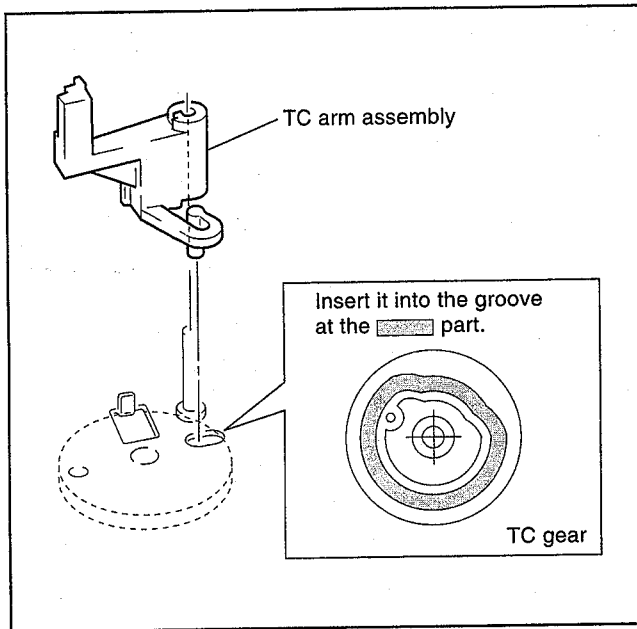
#### PHASE ADJUSTMENT ㉔



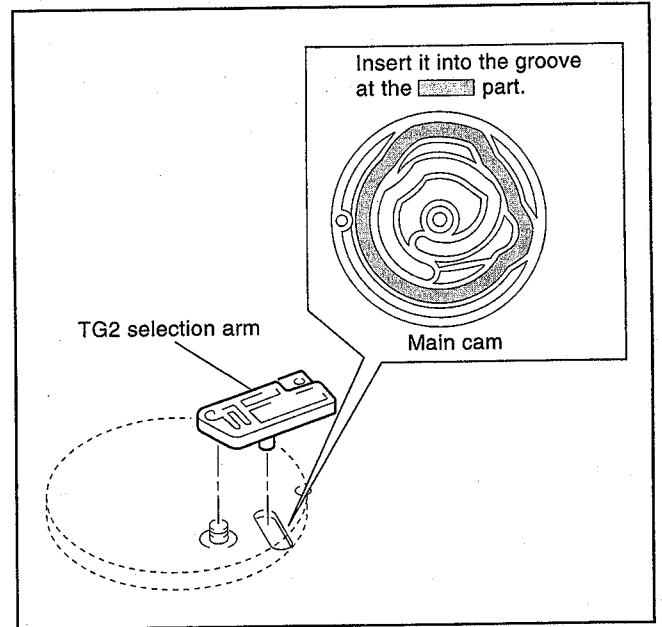
#### PHASE ADJUSTMENT ㉕



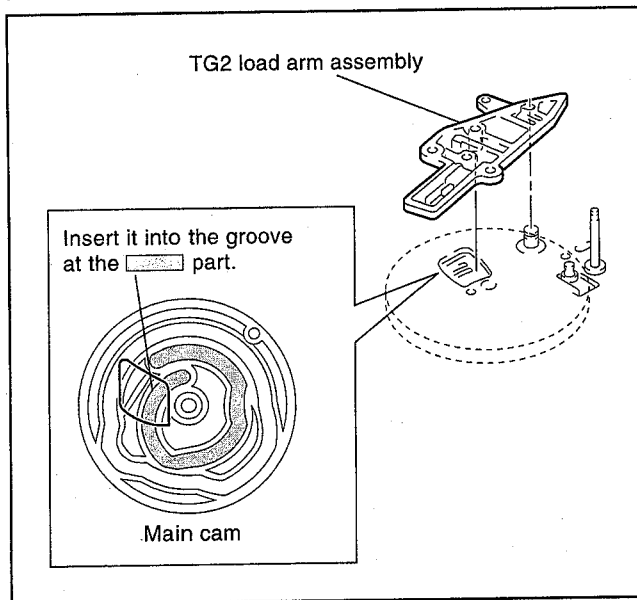
### PHASE ADJUSTMENT ③



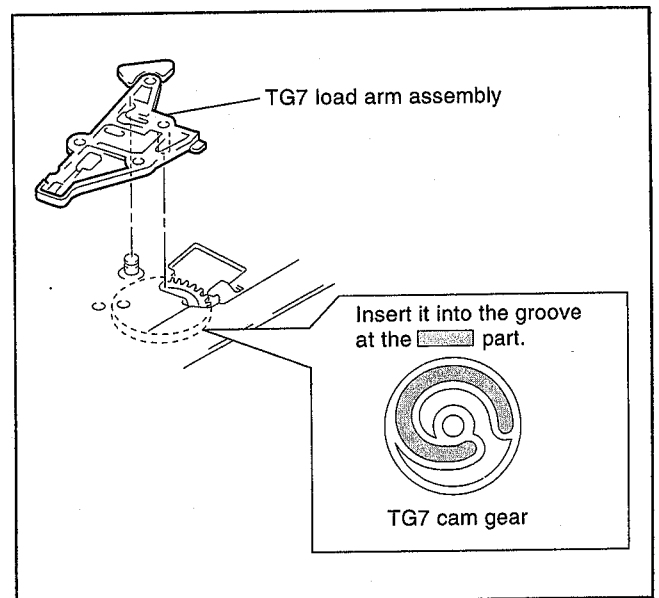
### PHASE ADJUSTMENT ①



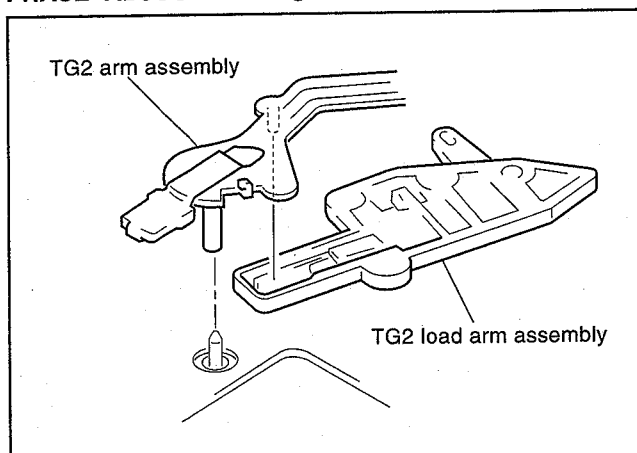
### PHASE ADJUSTMENT ②



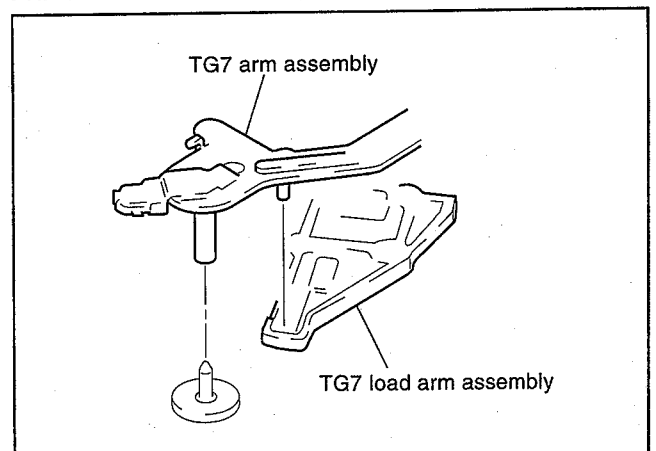
### PHASE ADJUSTMENT ④



### PHASE ADJUSTMENT ⑤



### PHASE ADJUSTMENT ⑥



#### 5-1-4. PERIODIC CHECK AND MAINTENANCE

- Carry out the following maintenance and periodic checks not only to fully display the functions and performance of the set, but also for the equipment and tape. After repairing, service the set as follows, regardless of the length of use.

##### 4-1. CLEANING OF ROTARY DRUM ASSEMBLY

- 1) Press a wiping cloth (Ref No. J-2) moistened with cleaning fluid (Ref No. J-1) against the rotary drum assembly gently, and clean it while rotating the upper rotary drum assembly slowly with your finger in the counterclockwise direction.

**Note:** Do not rotate the motor on power or rotate the upper rotary drum assembly in the clockwise direction with your finger. The head tip will also be damaged if the wiping cloth is moved perpendicularly against it. Therefore, be sure to follow the above instructions when cleaning the rotary drum assembly.

##### 4-2. CLEANING OF TAPE PATH SYSTEM (See Fig. 1.)

- 1) In the EJECT mode, clean the tape path systems (TG-1, 2, 3, 4, 5, 6, 7, 8, capstan) and the lower drum using a superfine applicator (Ref No. J-3) moistened with cleaning fluid.

**Note 1:** Make sure that no oil or grease of the link mechanisms sticks to the superfine applicator. (Ref No. J-3)

**Note 2:** Do not use a applicator moistened with alcohol to the other guide cleaning. But clean the pinch roller using alcohol.

**Note:** When cleaning the tape path system, be sure to set it to the **LOADING** position. (Refer to page 5-3)

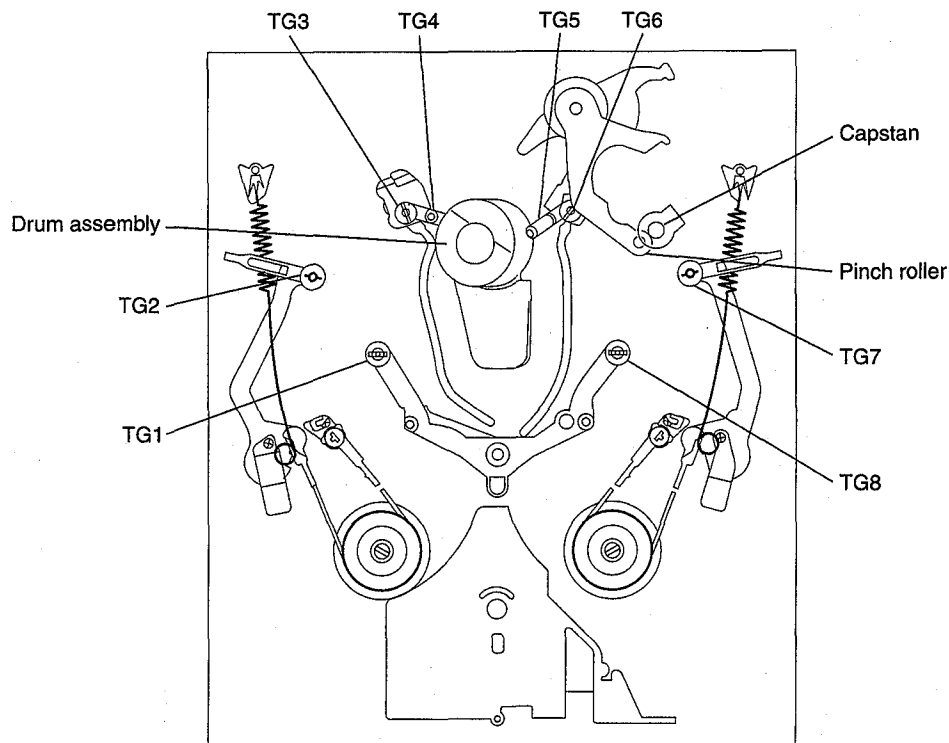


Fig. 1.

#### 4-3. PERIODIC CHECKS

Location of Maintenance and Check		Hours of Use (H)										Remarks
		500	1000	1500	2000	2500	3000	3500	4000	4500	5000	
	Cleaning of tape path surface	○	○	○	○	○	○	○	○	○	○	Take care not to adhere the oil.
	Cleaning and degaussing of rotary drum assembly	○	○	○	○	○	○	○	○	○	○	
Driving System	Capstan shaft (Bearing)	-	☆	-	☆	-	☆	-	☆	-	☆	Make sure that no oil gets on the tape path surface.
	Loading motor	-	☆	-	☆	-	☆	-	☆	-	☆	A-7026-007-A
Performance Confirmation	Abnormal noise	☆	☆	☆	☆	☆	☆	☆	☆	☆	☆	
	Back tension measurement	-	☆	-	☆	-	☆	-	☆	-	☆	
	Brake system	-	☆	-	☆	-	☆	-	☆	-	☆	
	FWD RVS } Torque measurement	-	☆	-	☆	-	☆	-	☆	-	☆	

○: Cleaning ☆: Confirmation

**Note:** When overhauling, refer to the checks above and replace parts.

**Note:** Grease

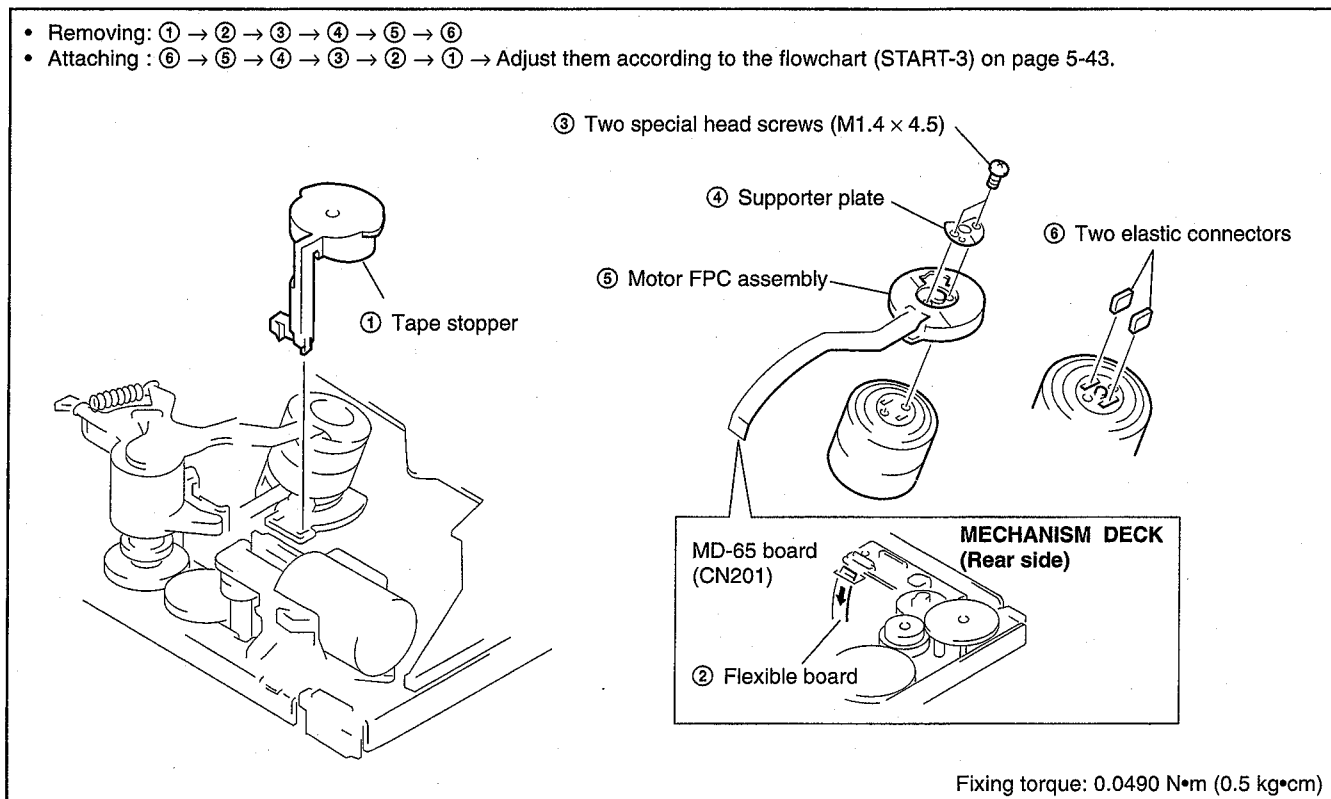
- Be sure to use the specified the grease. (The SG-055G is used all in the E mechanism)  
Check the quantity of grease when installing the parts which is needed to apply the grease.
- FLOIL (SG-055G): Part No. 7-651-000-09

## 5-1-5. MECHANISM SECTION CHECKS AND REPLACEMENTS

### 5-1. TAPE STOPPER, MOTOR FPC ASSEMBLY AND ELASTIC CONNECTOR

#### • Removing/Attaching

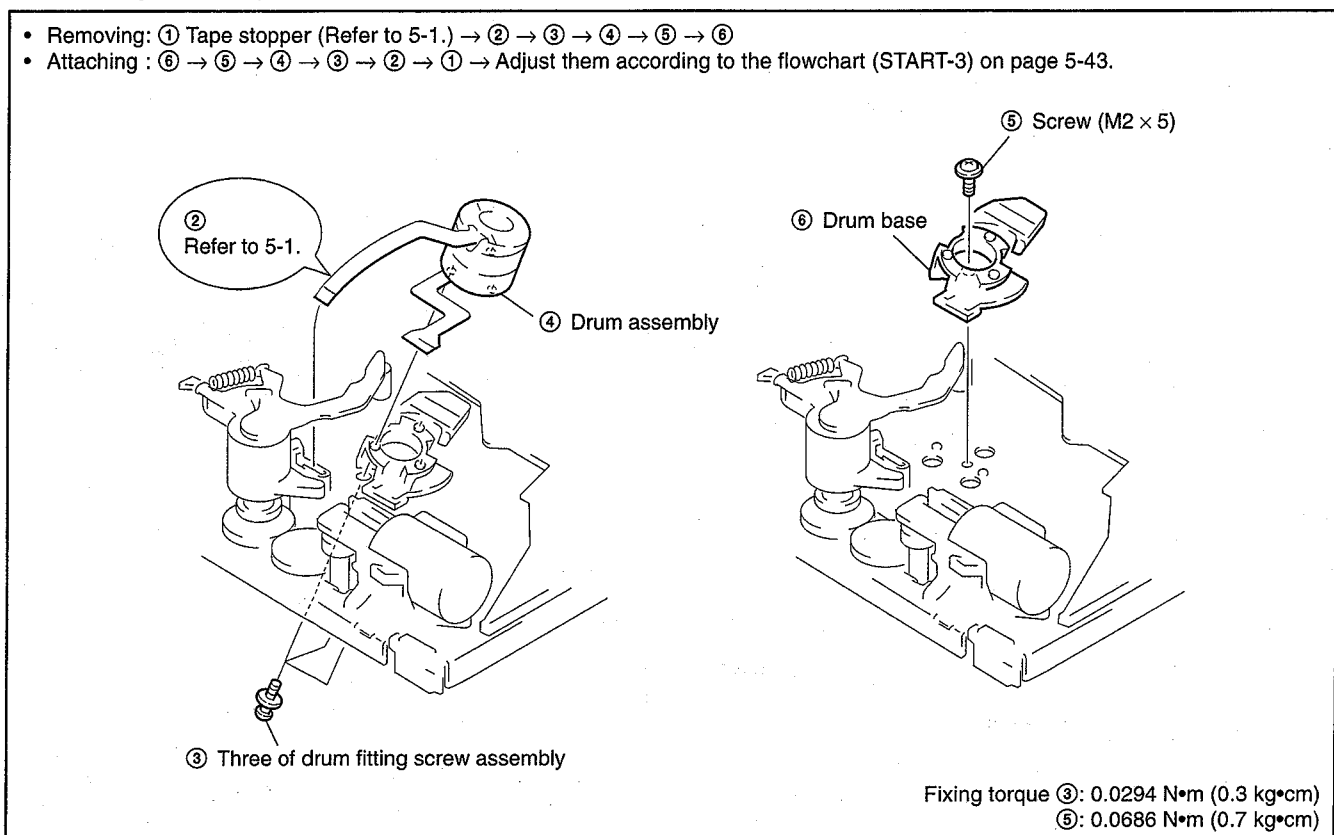
- Removing: ① → ② → ③ → ④ → ⑤ → ⑥
- Attaching : ⑥ → ⑤ → ④ → ③ → ② → ① → Adjust them according to the flowchart (START-3) on page 5-43.



### 5-2. DRUM ASSEMBLY AND DRUM BASE

#### • Removing/Attaching

- Removing: ① Tape stopper (Refer to 5-1.) → ② → ③ → ④ → ⑤ → ⑥
- Attaching : ⑥ → ⑤ → ④ → ③ → ② → ① → Adjust them according to the flowchart (START-3) on page 5-43.

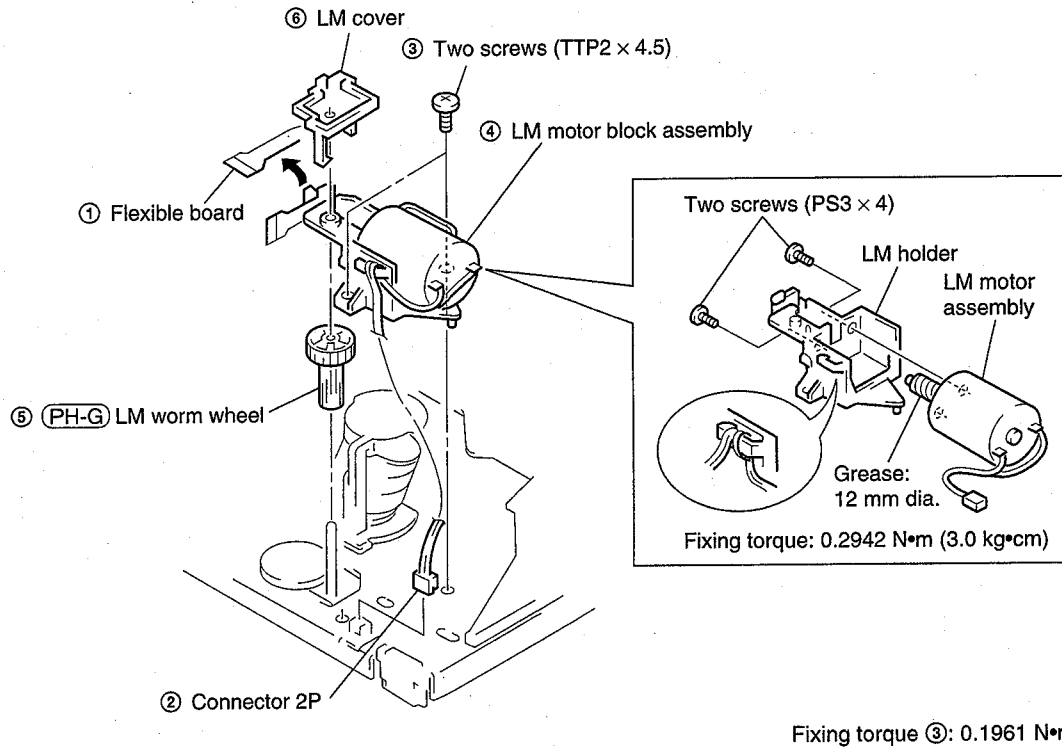




### 5-3. LM COVER, LM WORM WHEEL, LM HOLDER AND LM MOTOR ASSEMBLY

#### • Removing/Attaching

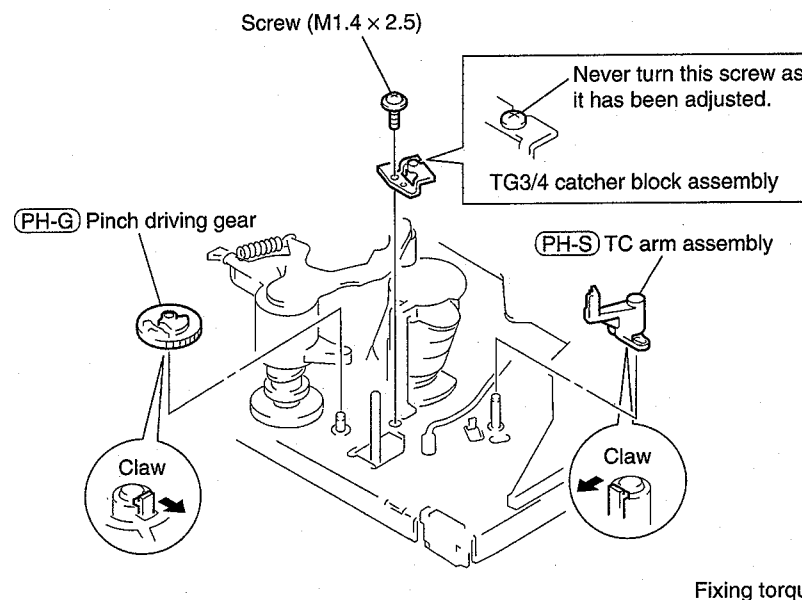
- Removing: ① → ② → ③ → ④ → ⑤ → ⑥
- Attaching : ⑥ → ⑤ → ④ → ③ → ② → ①



### 5-4. TG3/4 CATCHER BLOCK ASSEMBLY, PINCH DRIVING GEAR AND TC ARM ASSEMBLY

#### • Removing/Attaching

- Removing: After removing the LM motor assembly (Refer to 5-3.), remove each part.
- Attaching : After attaching each part and the LM motor block assembly, adjust them according to the flowchart (START-3) on page 5-43. (Only when the TG3/4 catcher block assembly is removed)

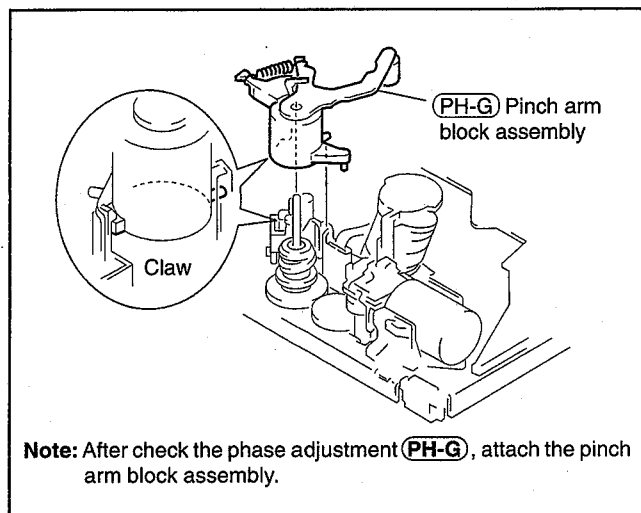


## 5-5. PINCH ARM ASSEMBLY, PINCH LIMITER AND TENSION COIL SPRING (PINCH)

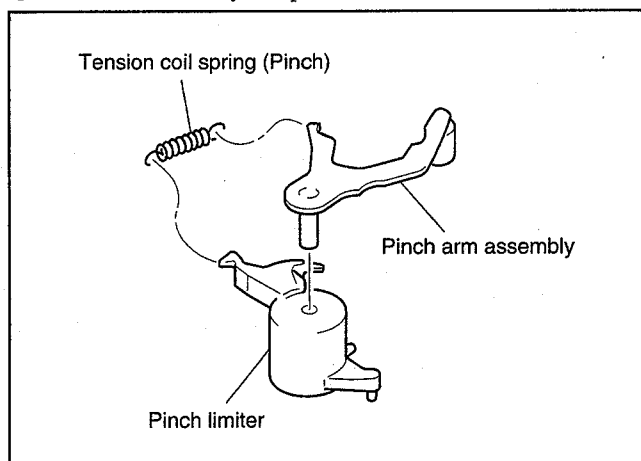
### 1. Removing

①. Set the **UNLOADING** position. (Refer to page 5-3)

②. Pinch arm block assembly.



③. Pinch arm assembly and pinch limiter.



### 2. Attaching

①. Attach the parts in the order of ① → ③ → ②.

②. Adjust them according to the flowchart (START-3) on page 5-43.

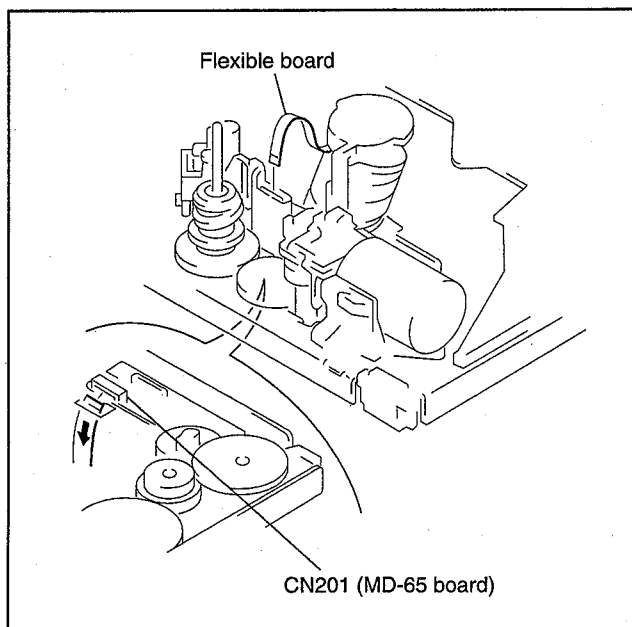
## 5-6. HC ARM, HC ROLLER ASSEMBLY, PINCH RETAINER, PINCH CAM GEAR AND TG5/6 CATCHER BLOCK ASSEMBLY

### 1. Removing

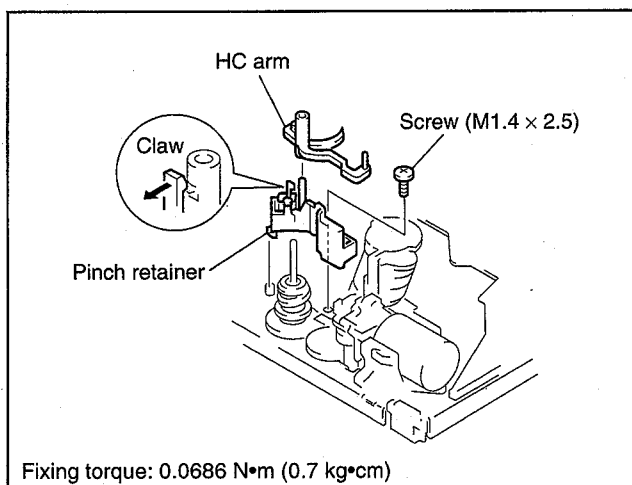
①. Set the **UNLOADING** position. (Refer to page 5-3)

②. Pinch arm block assembly. (Refer to 5-5)

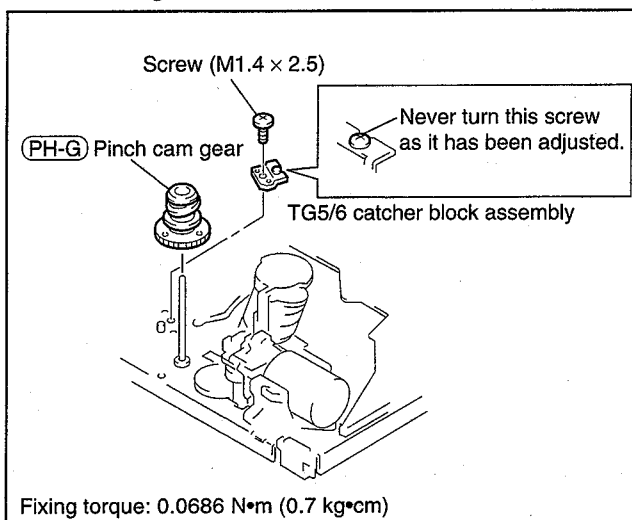
③. Flexible board.



④. HC arm, HC roller assembly and pinch retainer.



⑤. Pinch cam gear and TG5/6 catcher block assembly.



### 2. Attaching

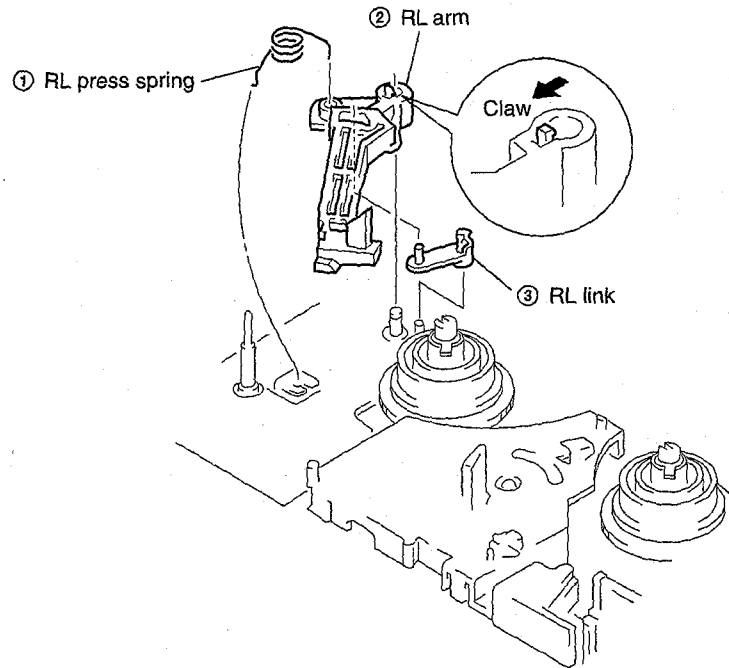
①. Attach the parts in the order of ① → ⑤ → ④ → ③ → ②.

②. Adjust them according to the flowchart (START-3) on page 5-43.

## 5-7. RL ARM AND RL LINK

- Removing/Attaching ((L cassette) position. (Refer to page 5-2))

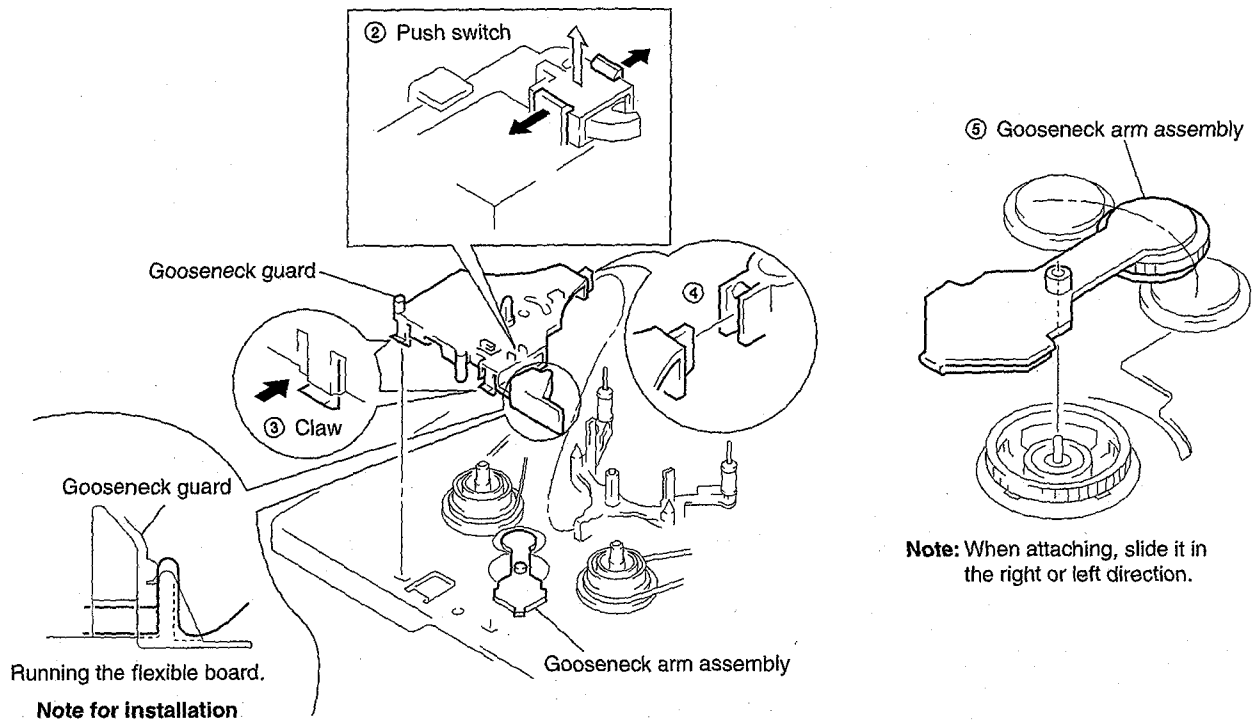
- Removing: ① → ② → ③
- Attaching : ③ → ② → ①



## 5-8. GOOSENECK GUARD AND GOOSENECK ARM ASSEMBLY

- Removing/Attaching ((L cassette) position. (Refer to page 5-2))

- Removing: ① Remove the RL arm. (Refer to 4-7) → ② → ③ → ④ → ⑤
- Attaching : ⑤ → ④ → ③ → ② → ①

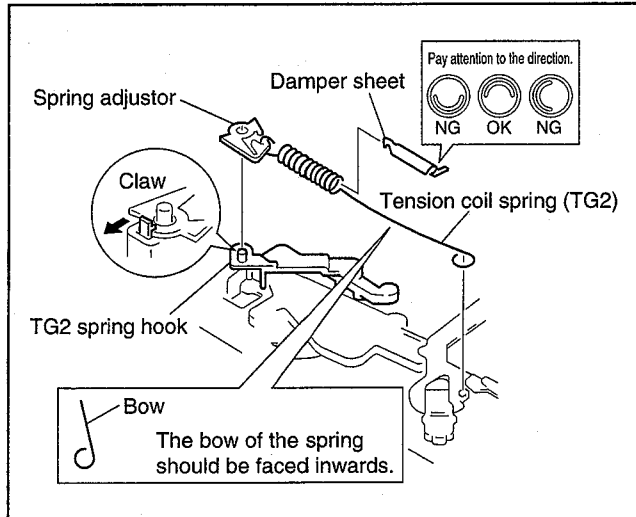


## 5-9. TENSION COIL SPRING (TG2), SPRING ADJUSTOR, TG2 SPRING HOOK, TG2 SELECTION ARM AND DAMPER SHEET

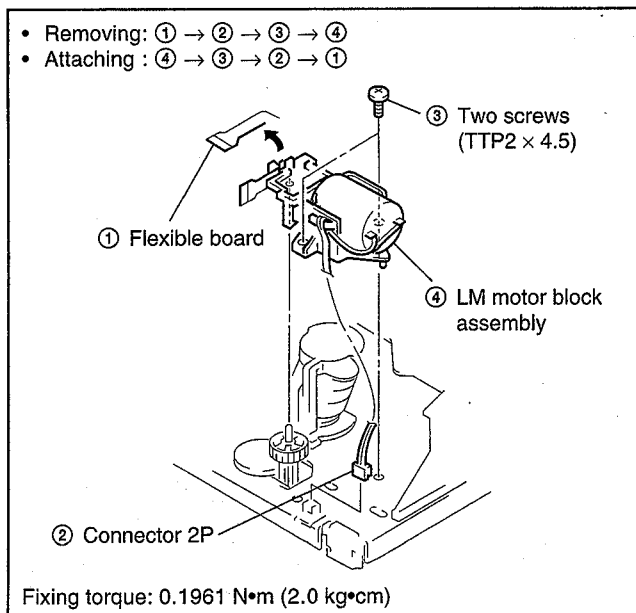
### 1. Removing

①. Set the **UNLOADING** position. (Refer to page 5-3)

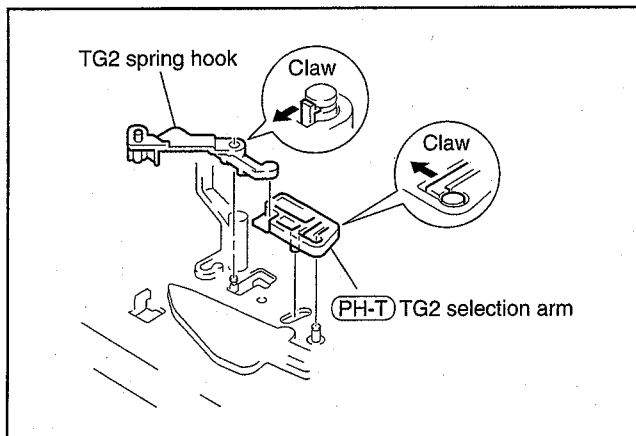
②. Tension coil spring (TG2) and spring adjustor.



③. LM motor block assembly.



④. TG2 spring hook and TG2 selection arm.



### 2. Attaching

①. Attach the parts in the order of ① → ④ → ② → ③.

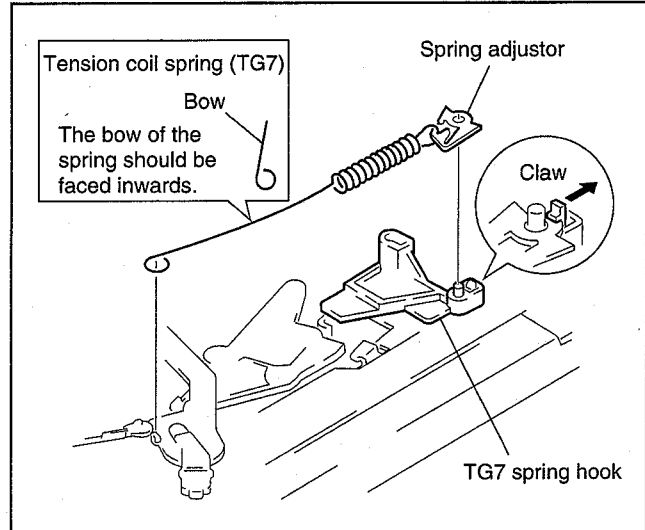
②. Adjust them according to the flowchart (START-2) on page 5-43.

## 5-10. TENSION COIL SPRING (TG7), SPRING ADJUSTOR AND TG7 SPRING HOOK

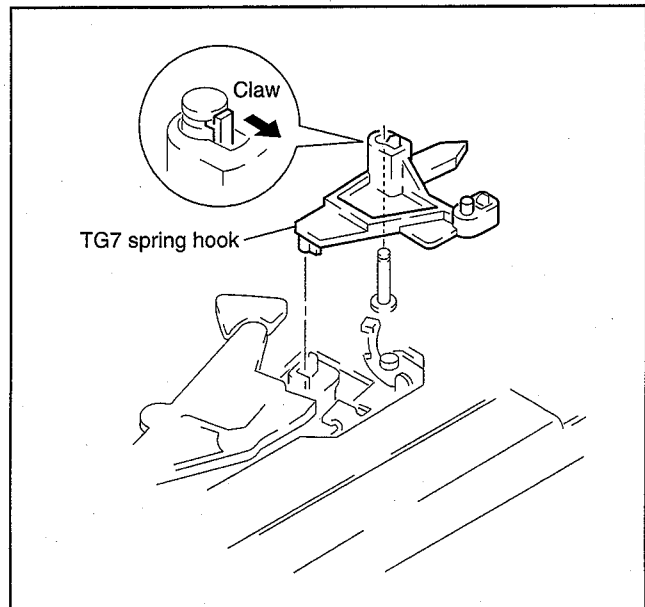
### 1. Removing

①. Set the **UNLOADING** position. (Refer to page 5-3)

②. Tension coil spring (TG7) and spring adjustor.



③. TG7 spring hook.



### 2. Attaching

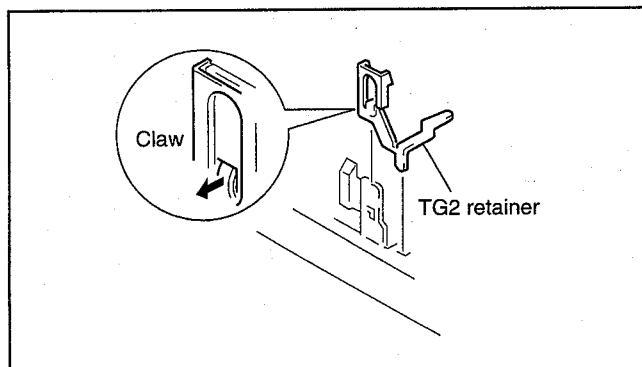
①. Attach the parts in the order of ① → ③ → ②.

②. Adjust them according to the flowchart (START-2) on page 5-43.

# 5-11. TG2 RETAINER, TG2 ARM ASSEMBLY (TG2 PLATE SPRING AND ET MAGNET), S TENSION REGULATOR BAND ASSEMBLY AND TG2 LOAD ARM ASSEMBLY

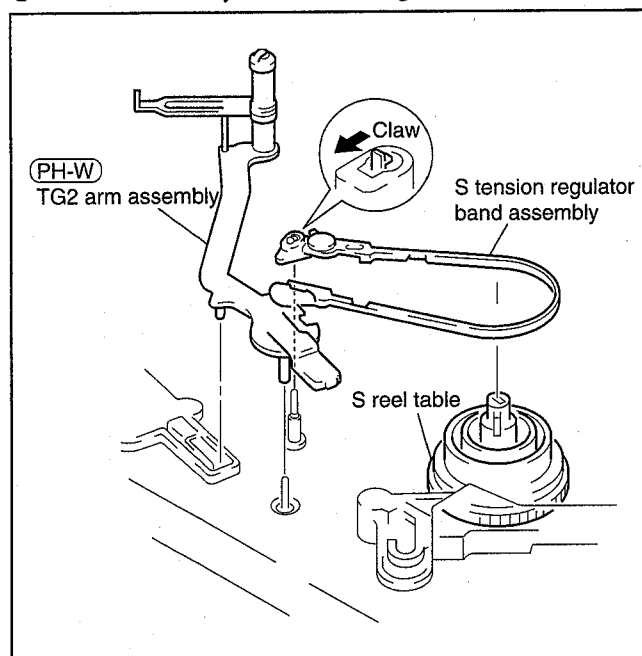
## 1. Removing

- ①. Tension coil spring (TG2), spring adjustor, LM motor block assembly and TG2 spring hook. (Refer to 5-9)
- ②. TG2 retainer.

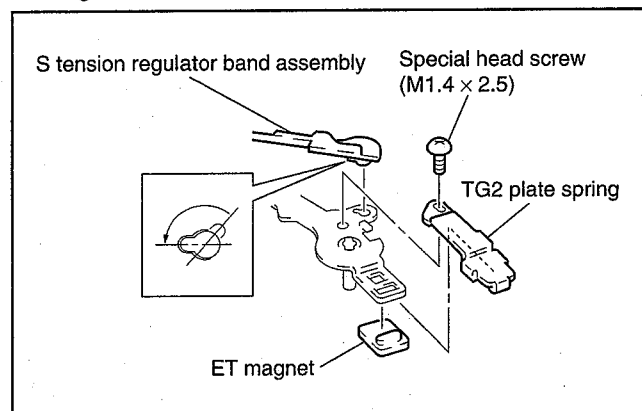


- ③. Set the **LOADING** position. (Refer to page 5-3)

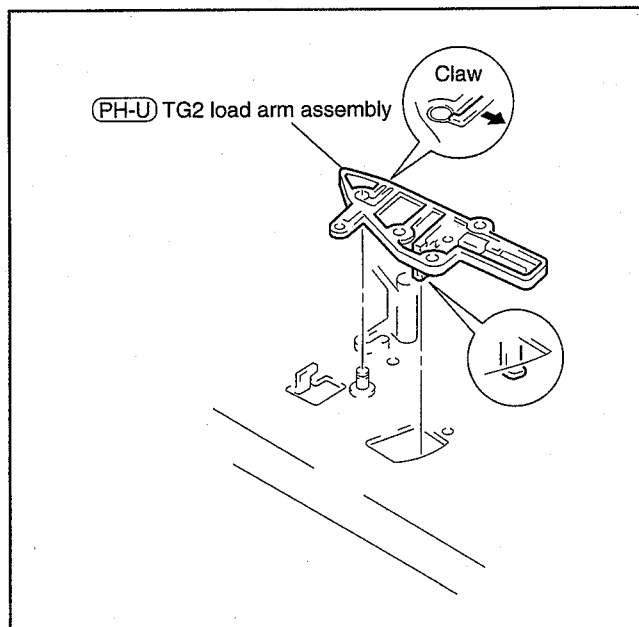
- ④. TG2 arm assembly and S tension regulator band assembly.



- ⑤. S tension regulator band assembly, TG2 plate spring and ET magnet.



- ⑥. TG2 load arm assembly.



## 2. Attaching

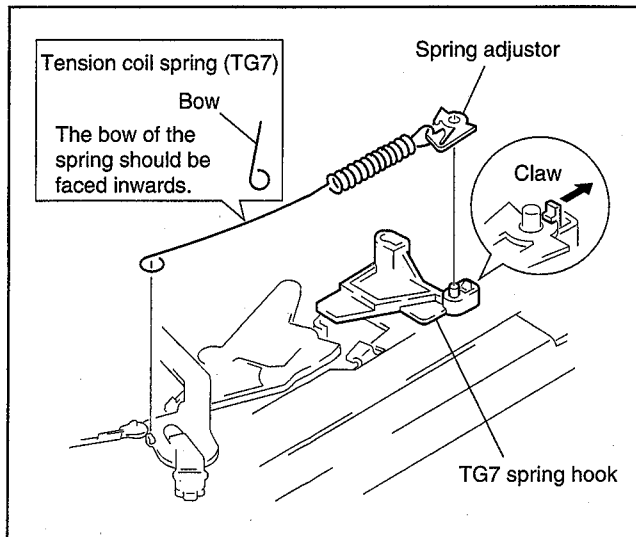
- ①. Set the **UNLOADING** position. (Refer to page 5-3)
- ②. Attach the parts in the order of ⑥ → ③ → ⑤ → ④ → ② → ①.
- ③. Operation check: **LOADING** / **UNLOADING**. (Refer to page 5-3)
- ④. Adjust them according to the flowchart (START-2) on page 5-43.



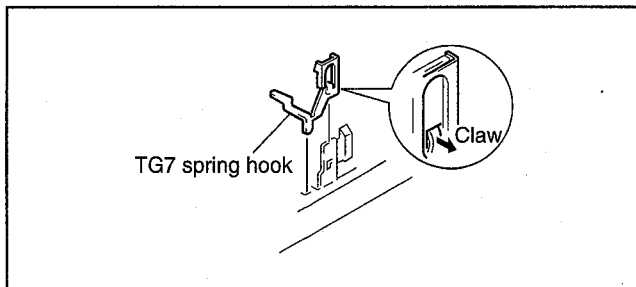
## 5-12. TG7 RETAINER, TG7 ARM ASSEMBLY (TG7 PLATE SPRING AND ET MAGNET), T TENSION REGULATOR BAND ASSEMBLY AND TG7 LOAD ARM ASSEMBLY

### 1. Removing

①. Tension coil spring (TG7), spring adjustor.

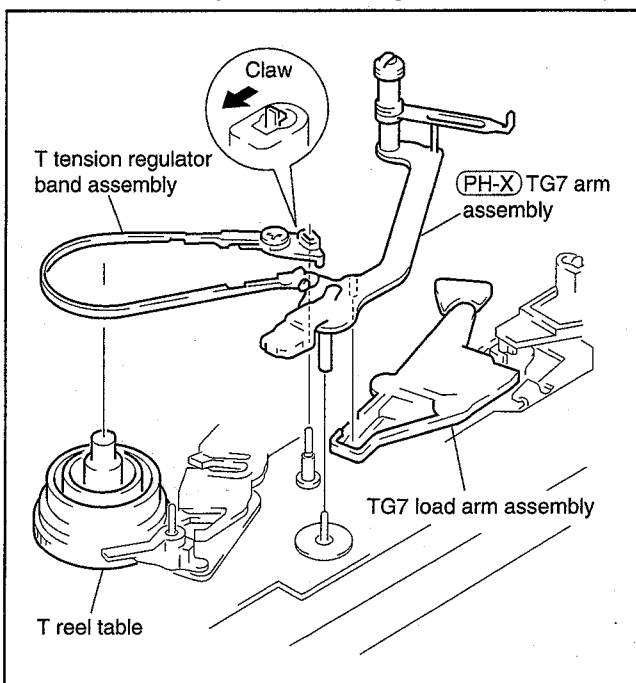


②. TG7 spring hook.

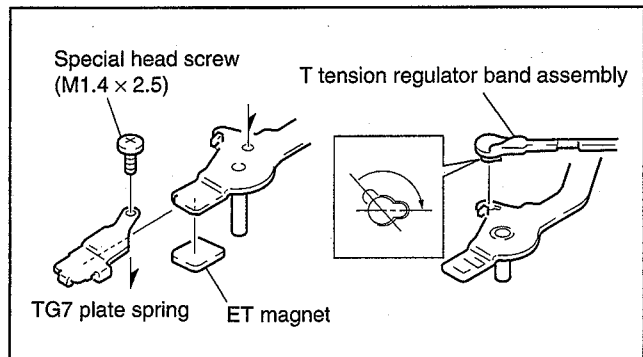


③. Set the **LOADING** position. (Refer to page 5-3)

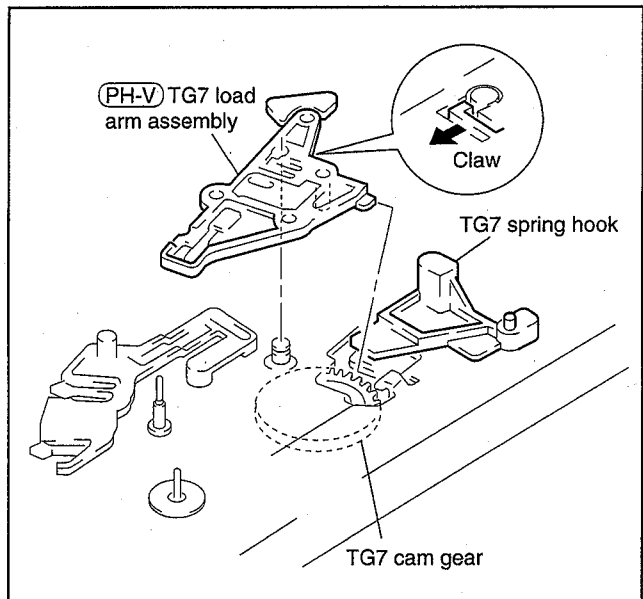
④. TG7 arm assembly and T tension regulator band assembly.



⑤. TG7 plate spring, ET magnet and T tension regulator band assembly.



⑥. TG7 load arm assembly.



### 2. Attaching

①. Set the **UNLOADING** position. (Refer to page 5-3)

②. Attach the parts in the order of ⑥ → ③ → ⑤ → ④ → ② → ①.

③. Operation check: **LOADING** / **UNLOADING**. (Refer to page 5-3.)

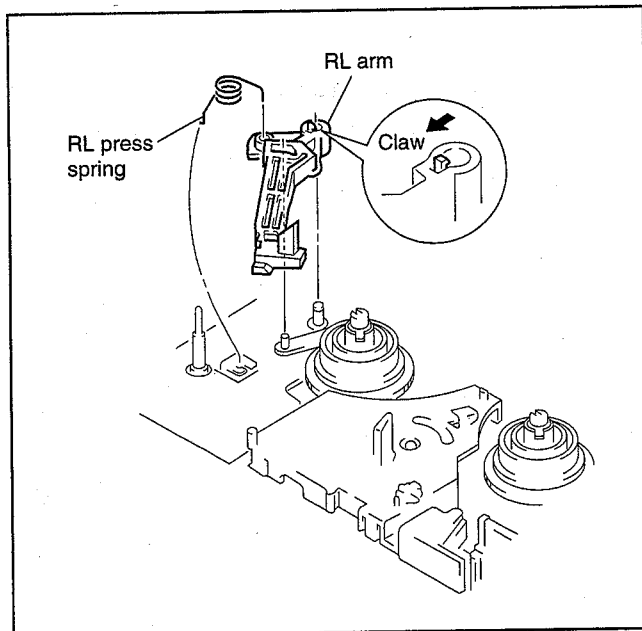
④. Adjust them according to the flowchart (START-2) on page 5-43.

## 5-13. S REEL TABLE BLOCK ASSEMBLY

### 1. Removing

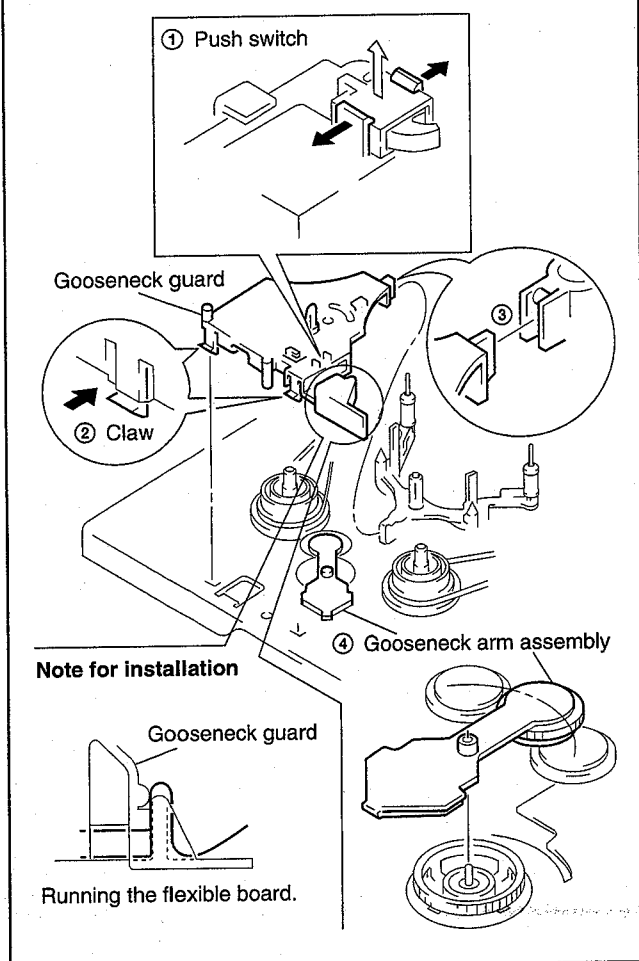
①. Set the **L cassette** position. (Refer to page 5-2)

②. RL arm

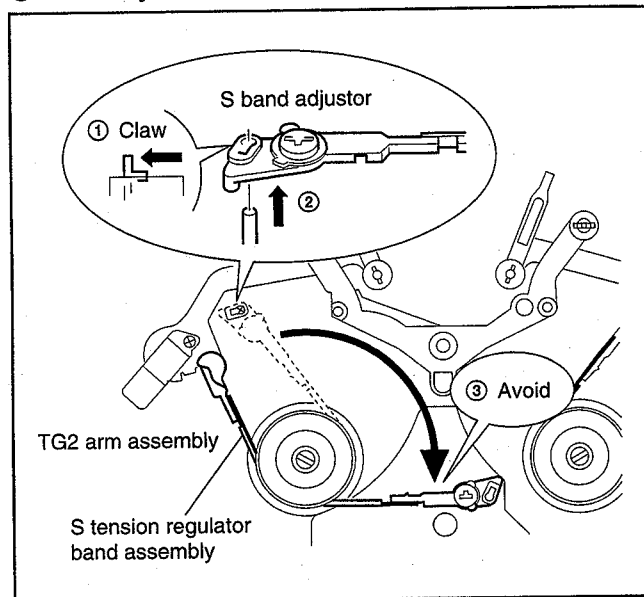


③. Gooseneck guard.

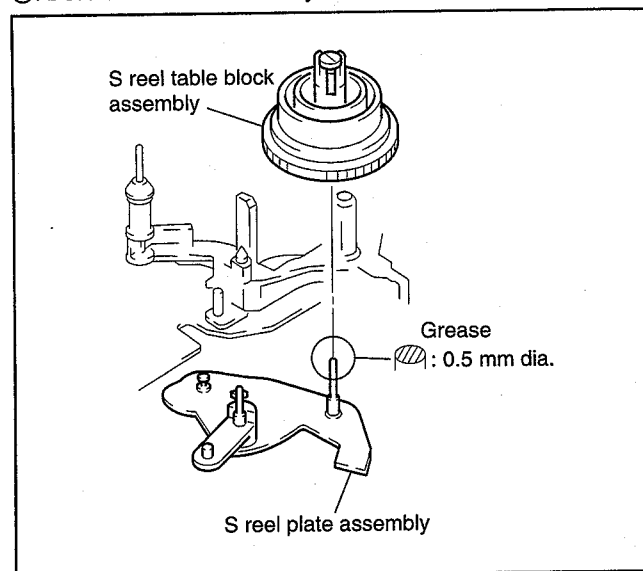
- Removing: ① → ② → ③ → ④
- Attaching : ④ → ③ → ② → ①



④. S band adjustor.



⑤. S reel table block assembly.



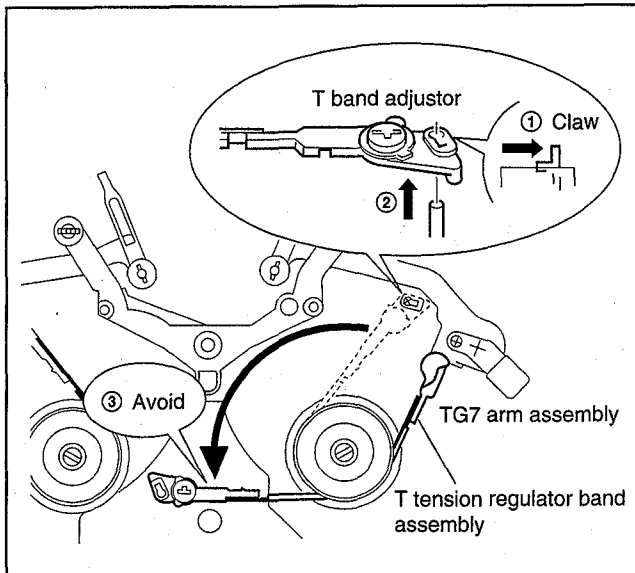
### 2. Attaching

- ①. Attach the parts in the order of ① → ⑤ → ④ → ③ → ②.
- ②. Adjust them according to the flowchart (START-1) on page 5-43.

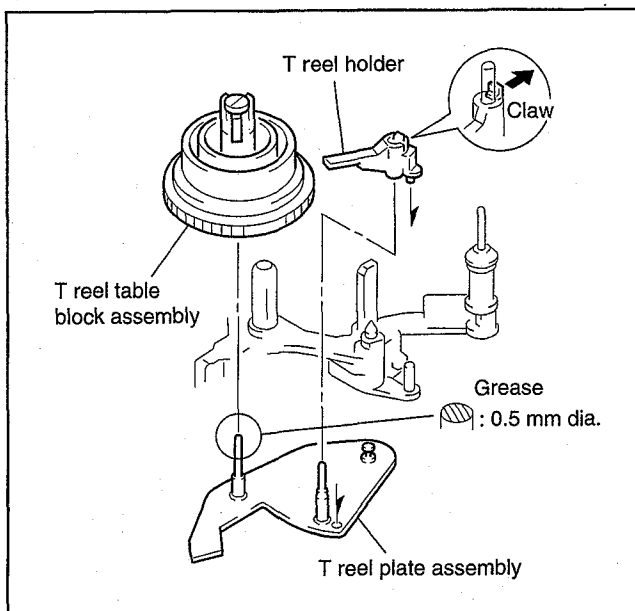
## 5-14. T REEL HOLDER AND T REEL TABLE BLOCK ASSEMBLY

### 1. Removing

- ①. Set the **(L cassette)** position. (Refer to page 5-2)
- ②. T band adjuster.



- ③. T reel holder and T reel table block assembly.



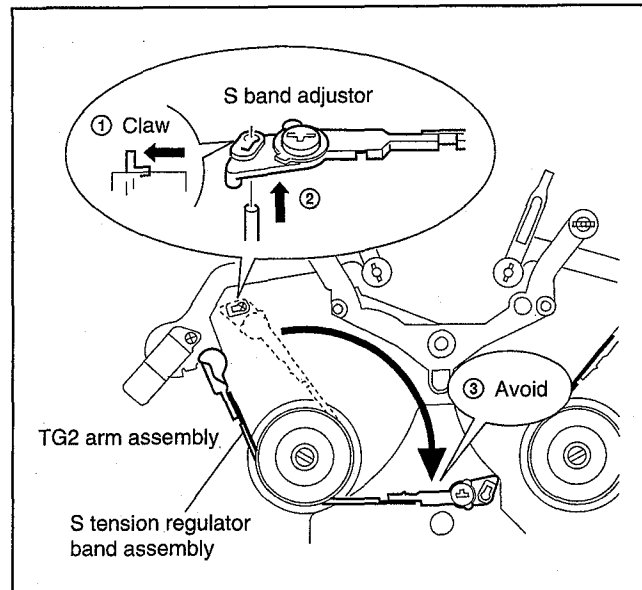
### 2. Attaching

- ①. Attach the parts in the order of ① → ③ → ②.
- ②. Adjust them according to the flowchart (START-1) on page 5-43.

## 5-15. S REEL PLATE ASSEMBLY

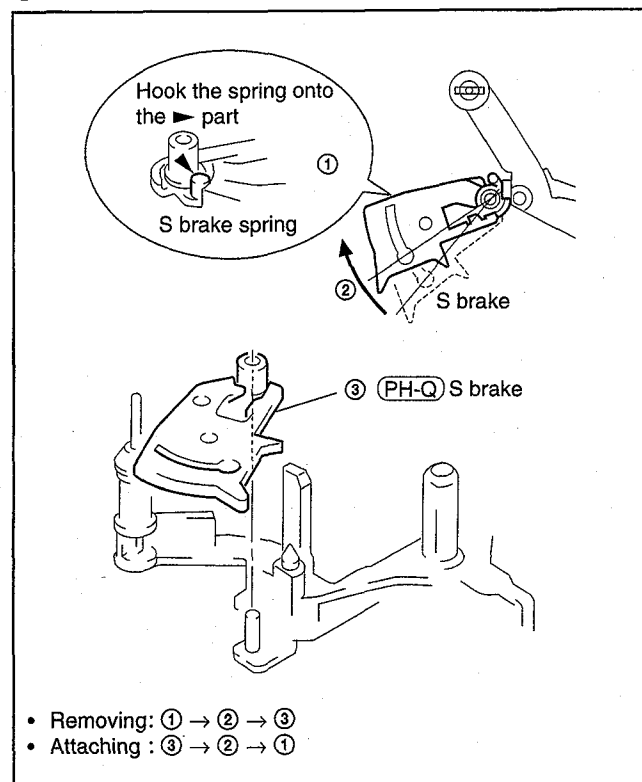
### 1. Removing

- ①. Set the **(L cassette)** position. (Refer to page 5-2)
- ②. S band adjuster.

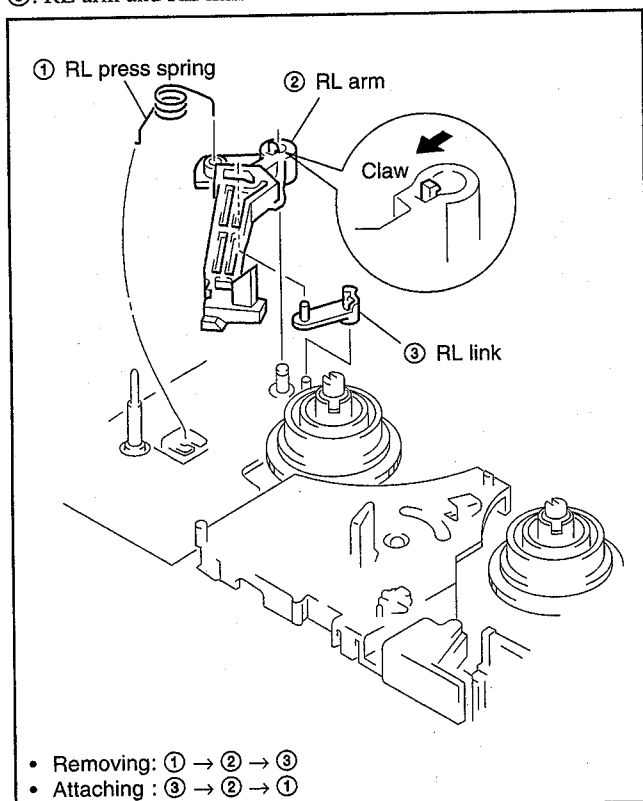


- ③. Set the **(LOADING)** position. (Refer to page 5-3)

- ④. S brake.

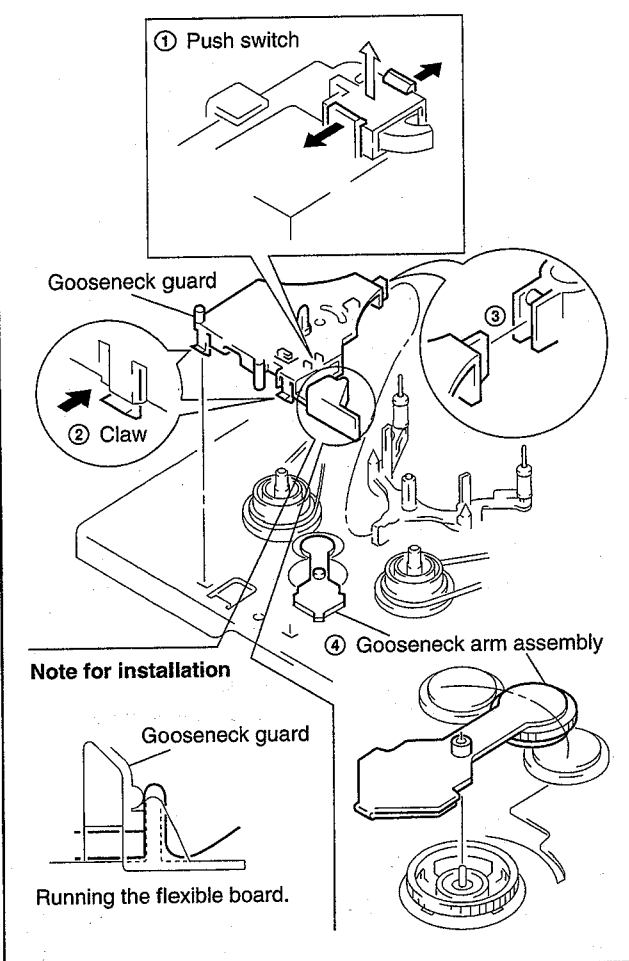


⑤. RL arm and RL link.

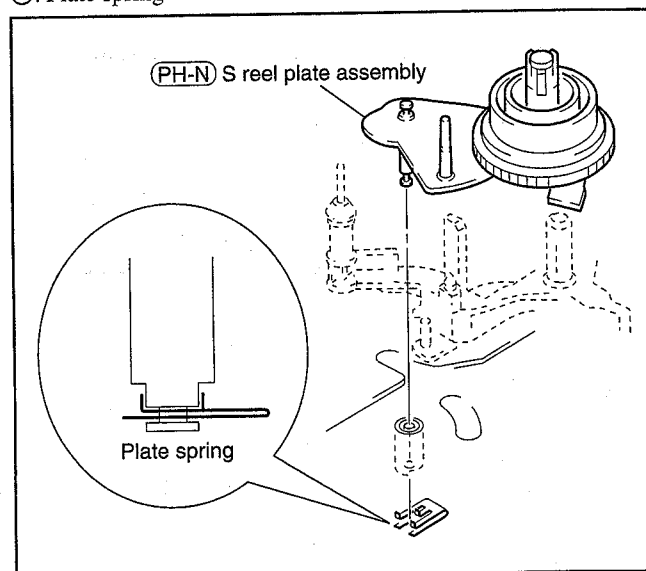


⑥. Gooseneck guard.

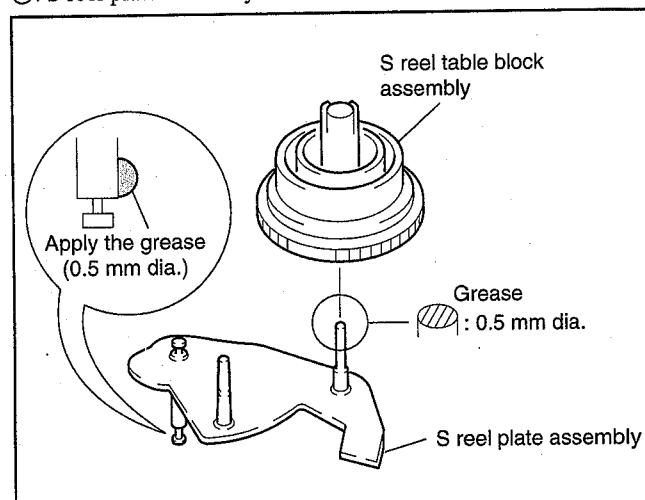
- Removing: ① → ② → ③ → ④
- Attaching: ④ → ③ → ② → ①



⑦. Plate spring



⑧. S reel plate assembly.



**2. Attaching**

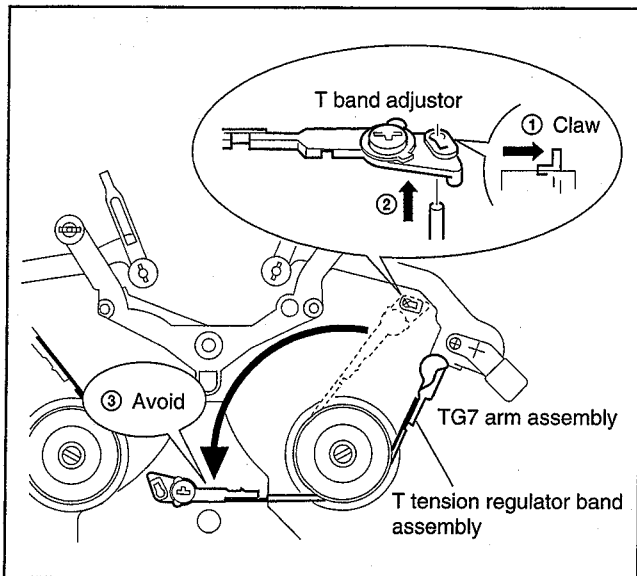
- ① Attach the parts in the order of ① → ⑧ → ⑦ → ④ → ③ → ② → ⑥ → ⑤.
- ② Adjust them according to the flowchart (START-1) on page 5-43.

## 5-16. T REEL PLATE ASSEMBLY

### 1. Removing

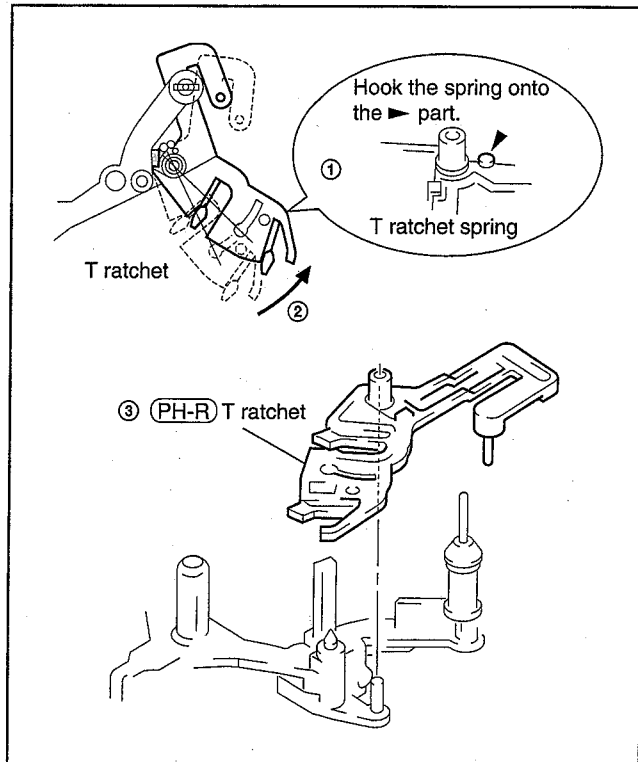
①. Set the **L cassette** position. (Refer to page 5-2)

②. T band adjustor.

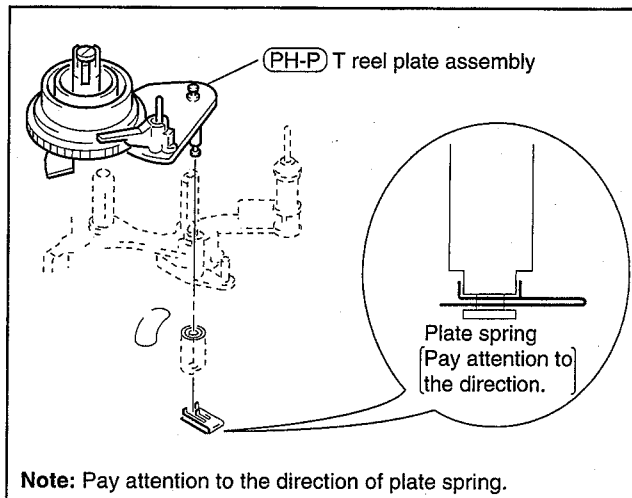


③. Set the **LOADING** position. (Refer to page 5-3)

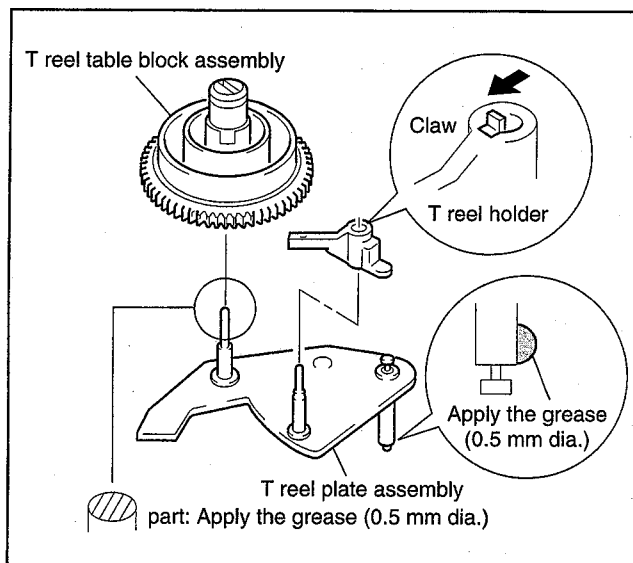
④. T ratchet.



⑤. Plate spring.



⑥. T reel plate assembly.



### 2. Attaching

①. Attach the parts in the order of ① → ⑥ → ⑤ → ③ → ④ → ②.

②. Adjust them according to the flowchart (START-1) on page 5-43.



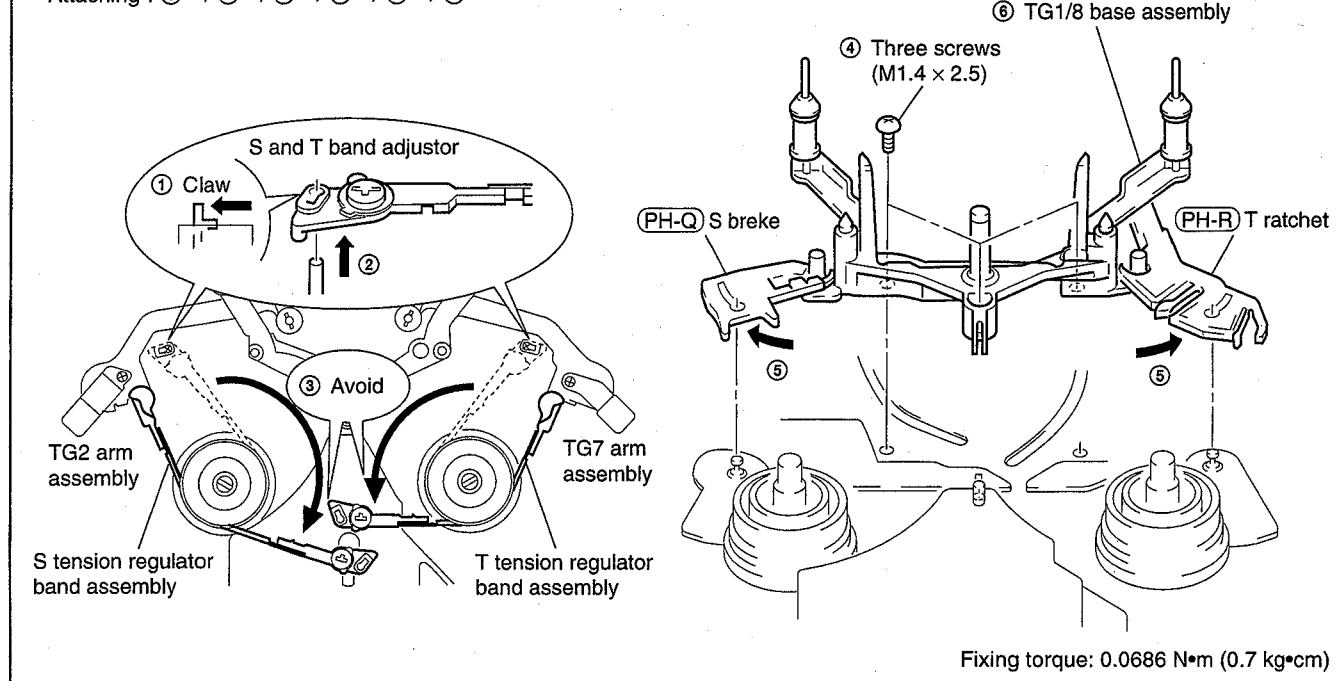
## 5-17. TG1/8 BASE ASSEMBLY, S BRAKE AND T RATCHET

### 1. Removing

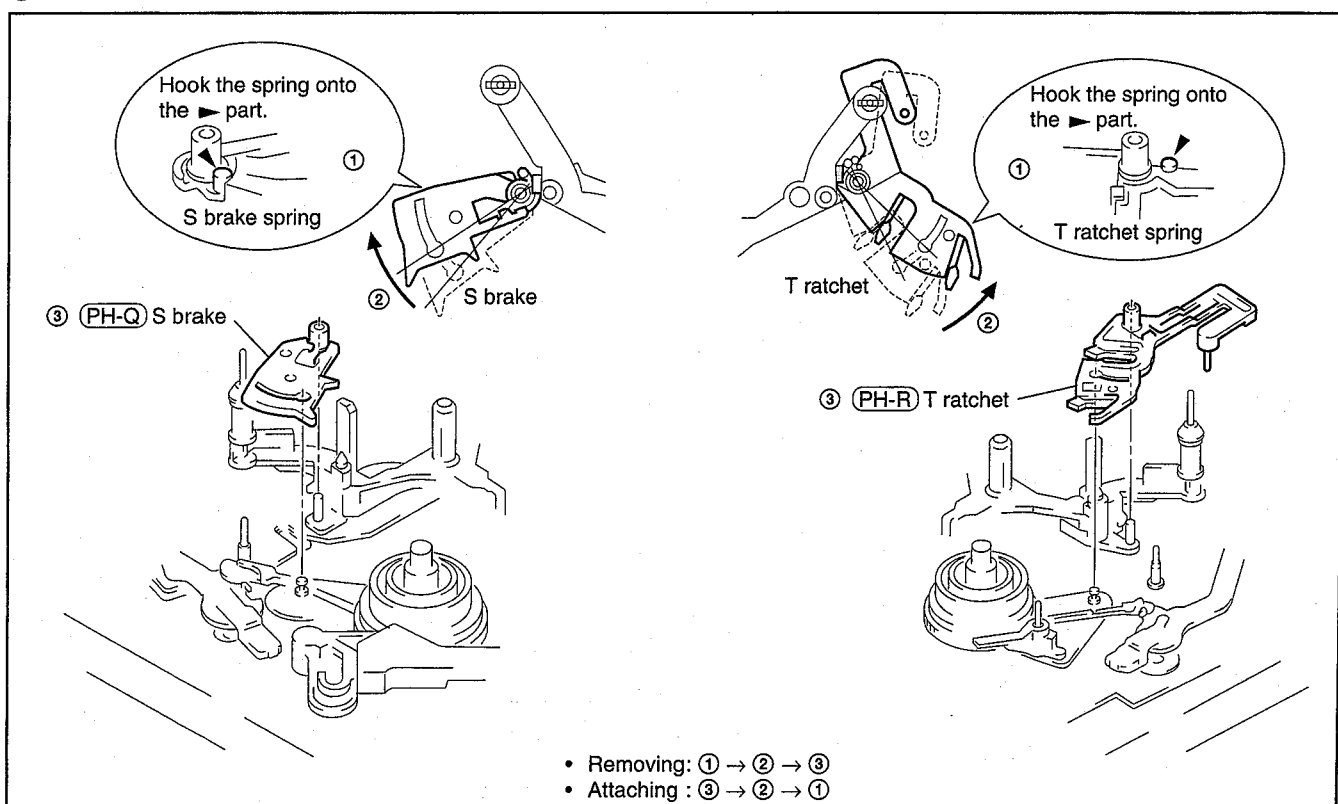
①. Set the **LOADING** / **L cassette** positions. (Refer to pages 5-2 to 5-3)

②. TG1/8 base assembly.

- Removing: ① → ② → ③ → ④ → ⑤ → ⑥
- Attaching : ⑤ → ⑥ → ④ → ③ → ② → ①



③. S brake and T ratchet.



### 2. Attaching

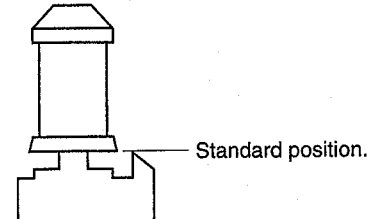
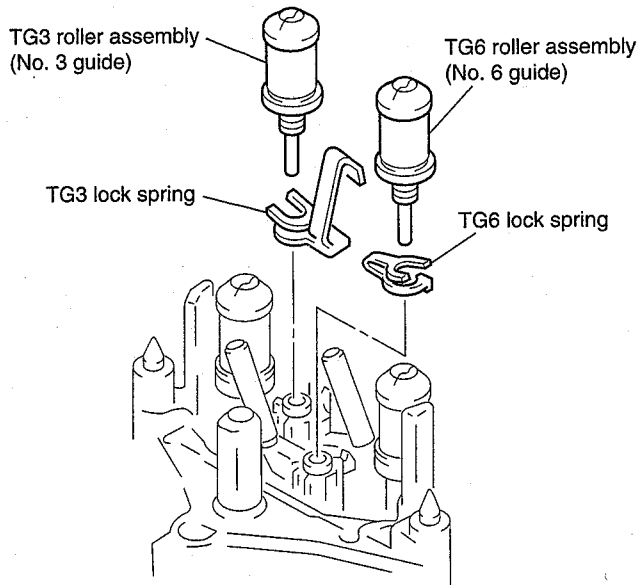
①. Attach the parts in the order of ① → ③ → ②.

②. Adjust them according to the flowchart (START-2) on page 5-43.

## 5-18. TG3/6 ROLLER ASSEMBLY AND TG3/6 LOCK SPRING

### • Removing/Attaching

**Note:** **UNLOADING** position. (Refer to page 5-3)



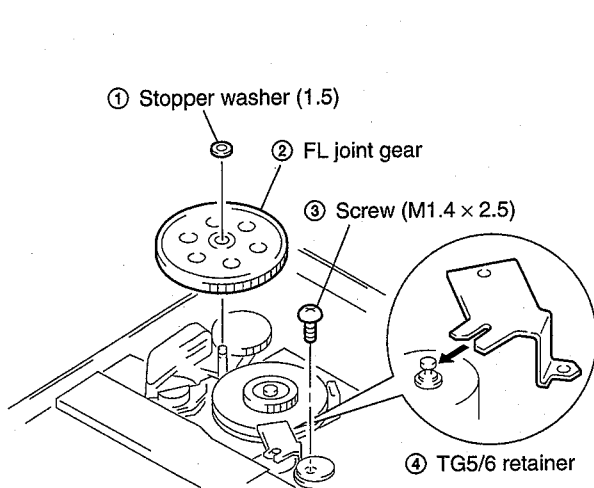
Preset the height as shown in the figure.

**Note:** After attaching each part, adjust them according to the flowchart (START-3) on page 5-43.

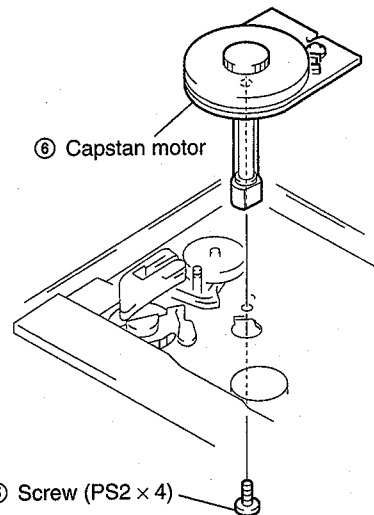
## 5-19. FL JOINT GEAR, TG5/6 RETAINER AND CAPSTAN MOTOR

### • Removing/Attaching

- Removing: ① → ② → ③ → ④ → ⑤ → ⑥
- Attaching : ⑥ → ⑤ → ④ → ③ → ② → ①



Fixing torque ③: 0.0686 N•m (0.7 kg•cm)



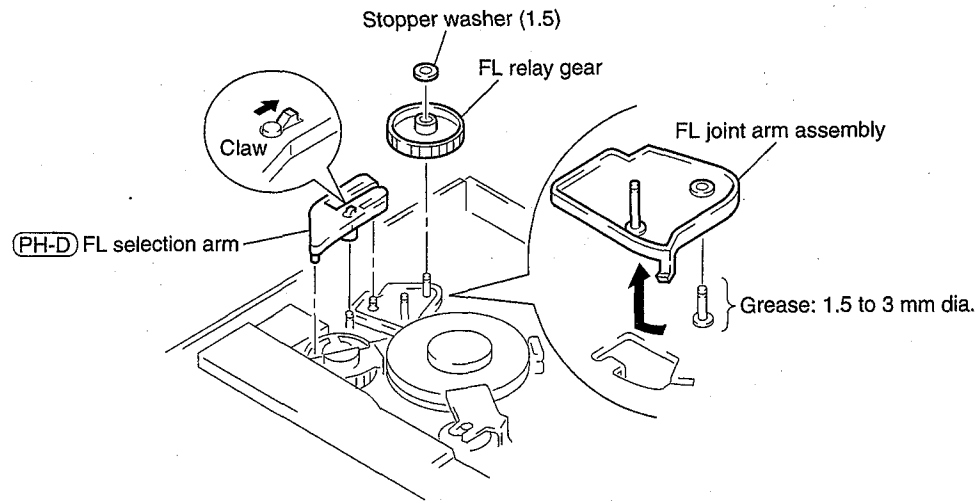
⑤ Screw (PS2 x 4)

Fixing torque ⑥: 0.1961 N•m (2.0 kg•cm)

## 5-20. FL SELECTION ARM, FL RELAY GEAR AND FL JOINT ARM ASSEMBLY

### • Removing/Attaching

**Note:** First, remove the FL joint gear. (Refer to 5-19)

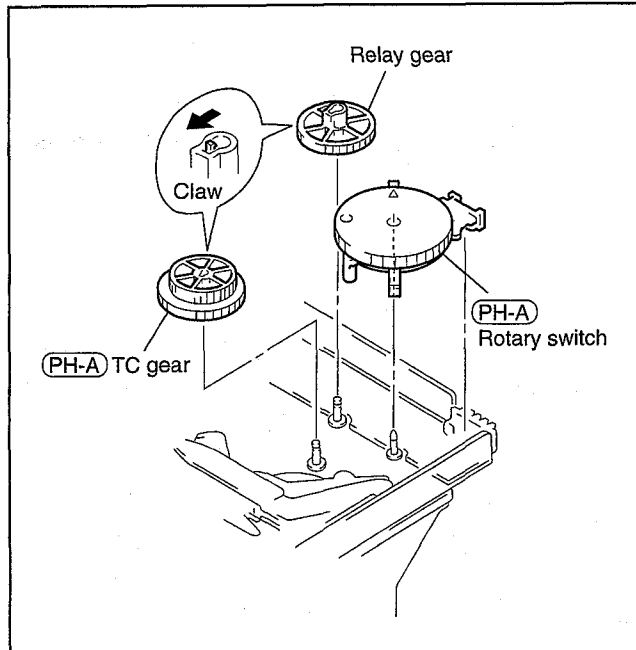


## 5-21. ROTARY SWITCH, TC GEAR AND RELAY GEAR

### 1. Removing

①. Set the **UNLOADING** position. (Refer to page 5-3)

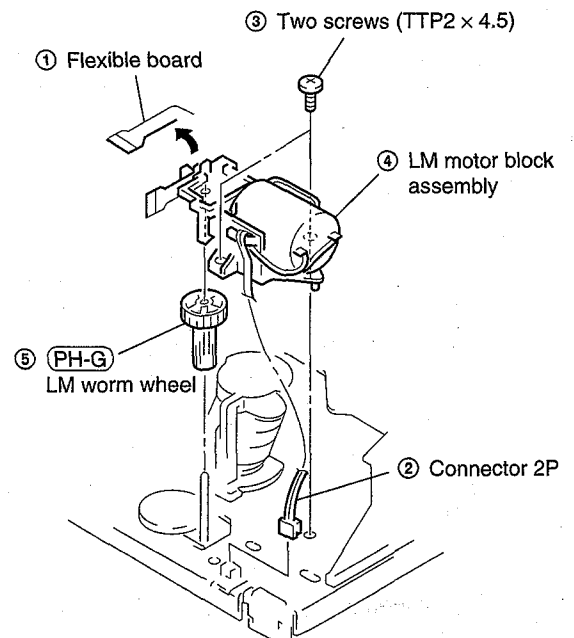
②. Rotary switch, TC gear and relay gear.



### 2. Attaching

①. Remove the LM motor block assembly and LM worm wheel. (To synchronize phase of the pinch driving system (front side) and the loading driving system (back side))

- Removing: ① → ② → ③ → ④ → ⑤
- Attaching : ⑤ → ④ → ③ → ② → ①

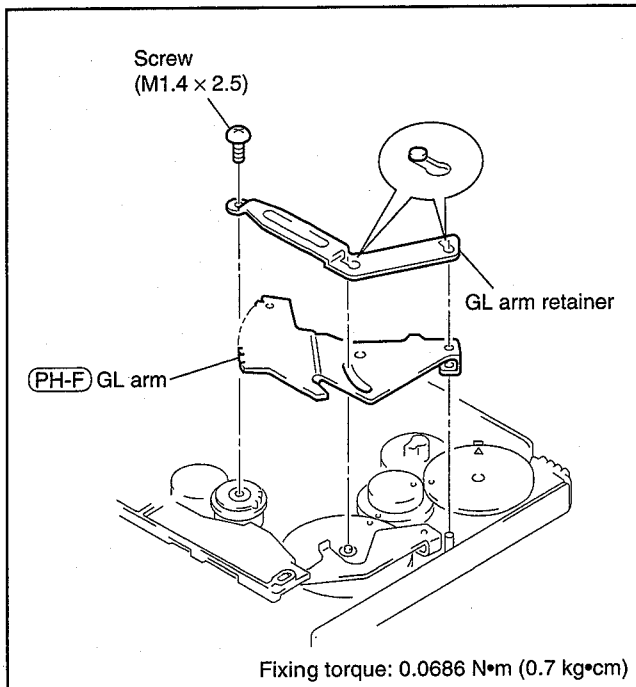


Fixing torque: 0.1961 N·m (2.0 kg·cm)

- ②. Attach the TC gear, relay gear and rotary switch.
- ③. Attach the LM worm wheel and LM motor block assembly.

## 5-22. GL ARM RETAINER AND GL ARM

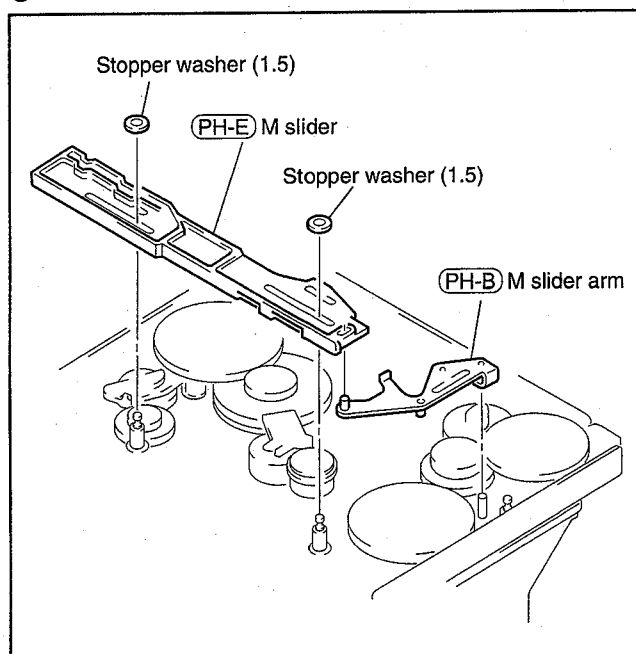
- Removing/Attaching (**UNLOADING**) position. (Refer to page 5-3))



## 5-23. M SLIDER AND M SLIDER ARM

### 1. Removing

- ① Set the **UNLOADING** position. (Refer to page 5-3)
- ② GL arm retainer and GL arm. (Refer to 5-22)
- ③ M slider and M slider arm.



### 2. Attaching

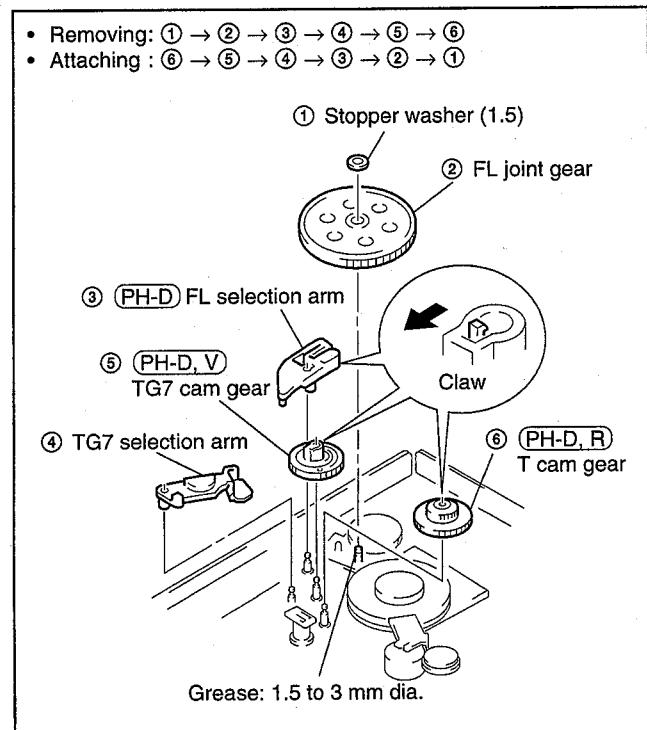
- Attach the parts in the order of ① → ③ → ②.

## 5-24. TG7 SELECTION ARM, TG7 CAM GEAR AND T CAM GEAR

### 1. Removing

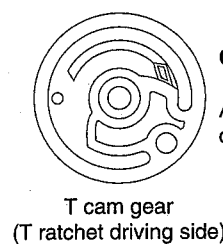
- ① Set the **UNLOADING** position. (Refer to page 5-3)
- ② GL arm retainer and GL arm. (Refer to 5-22)
- ③ M slider and M slider arm. (Refer to 5-23)
- ④ TG7 selection arm, TG7 cam gear and T cam gear.

- Removing: ① → ② → ③ → ④ → ⑤ → ⑥
- Attaching : ⑥ → ⑤ → ④ → ③ → ② → ①



### 2. Attaching

- ① Attach the parts in the order of ① → ④ → ③ → ②.



Cam groove on the T cam gear.

Apply the grease (3 mm dia) to of cam groove (part).

## 5-25. MAIN CAM, TG2 SL ARM ASSEMBLY AND TENSION COIL SPRING (TG2 SL)

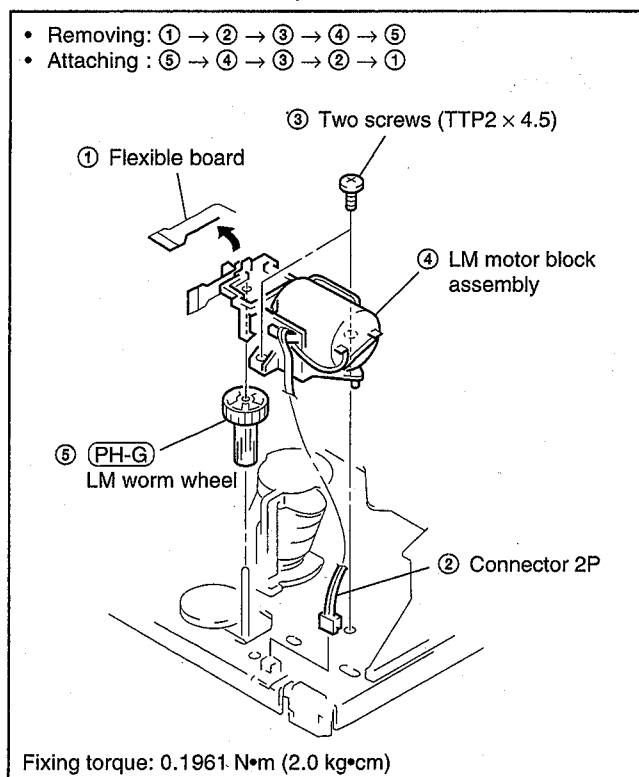
The two grooves on one side of the main cam drive the TG2 selection arm and the TG2 load arm assembly.

Since it is difficult to attach the main cam, fix the TG2 selection arm and the TG2 load arm assembly with the main cam's phase adjusted correctly (Nearly unloading position (See 3-1. Phase Adjustment ④: page 5-6)), so that later mounting work can be performed smoothly. If fixed parts are shifted, follow "3-3. Phase Adjustment ①, ②: page 5-11".

### 1. Removing

①. Set the **UNLOADING** position. (Refer to page 5-3)

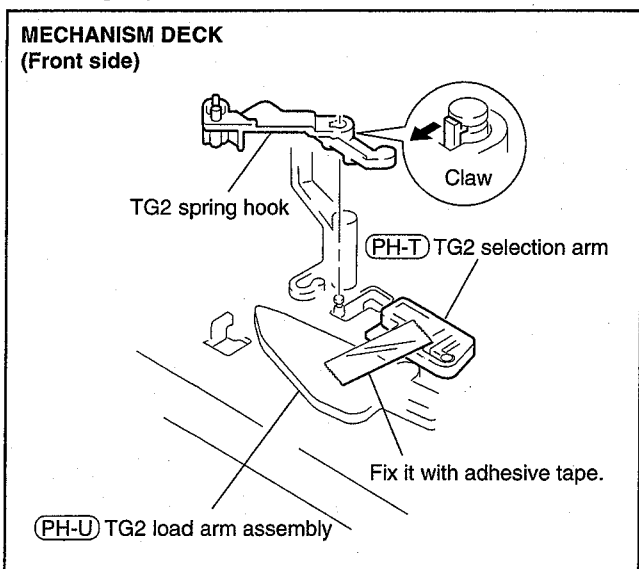
②. LM motor block assembly and LM worm wheel.



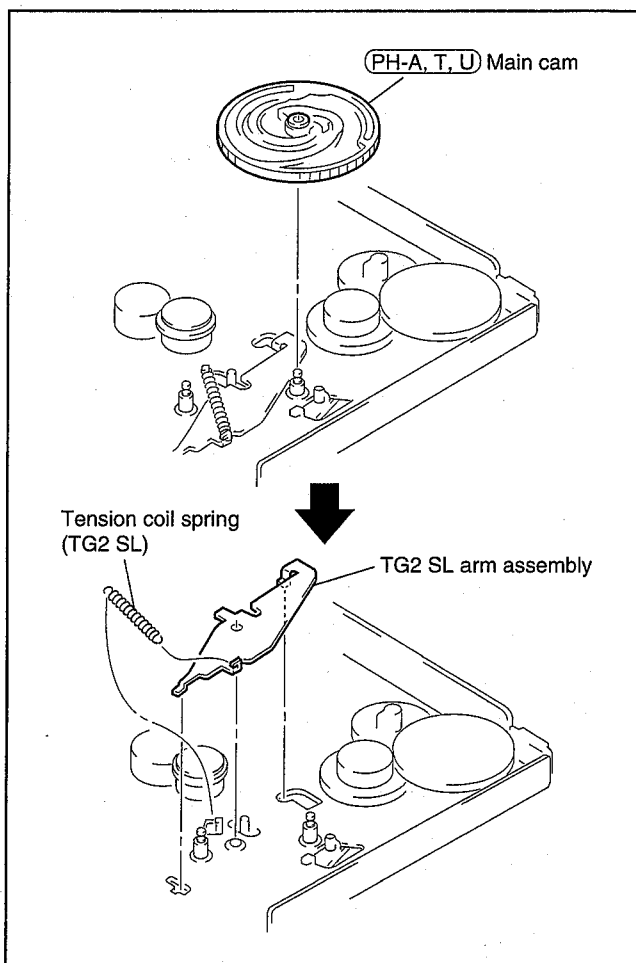
③. GL arm retainer and GL arm. (Refer to 5-22)

④. M slider and M slider arm. (Refer to 5-23)

⑤. TG2 spring hook.

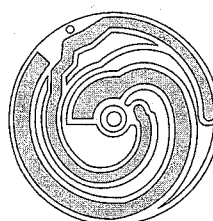


⑥. Main cam, TG2 SL arm assembly and tension coil spring (TG2 SL).



### 2. Attaching

- ①. Attach the parts in the order of ① → ⑥ → ⑤ → ④ → ③ → ②.
- ②. Adjust them according to the flowchart (START-2) on page 5-43.



Cam groove on the main cam.

Apply the grease (12 mm dia.) to each two of cam groove (■ part).

Main cam (rear side)

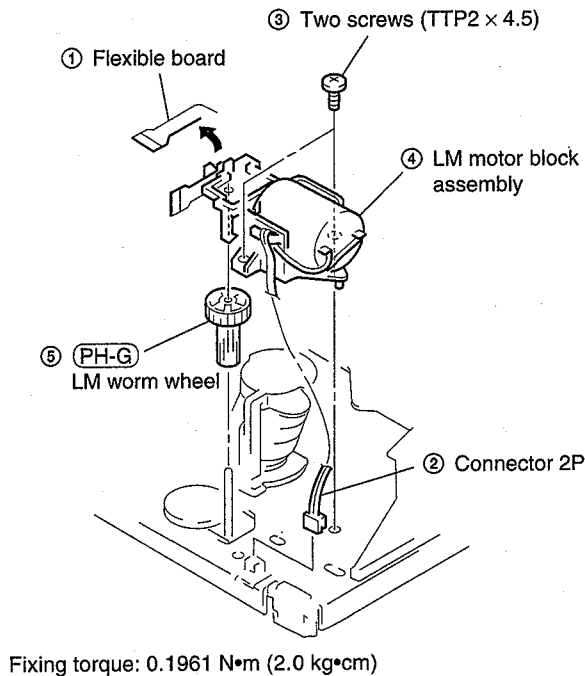
## 5-26. TG3/4 ARM BLOCK ASSEMBLY (TG3/4 ARM ASSEMBLY, TG3/4 LIMITER SPRING AND TG3/4 GEAR), TG3/4 BASE BLOCK ASSEMBLY (TG3/4 BASE ASSEMBLY)

### 1. Removing

①. Set the **UNLOADING** position. (Refer to page 5-3)

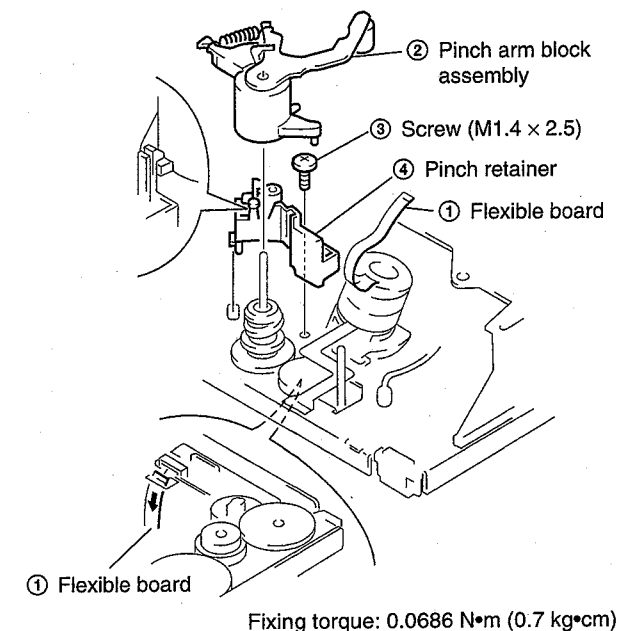
②. LM motor block assembly and LM worm wheel.

- Removing: ① → ② → ③ → ④ → ⑤
- Attaching : ⑤ → ④ → ③ → ② → ①

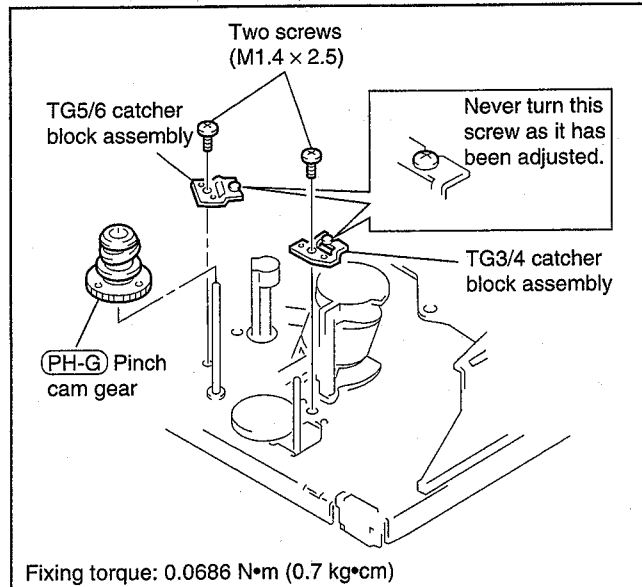


③. Pinch arm block assembly and pinch retainer.

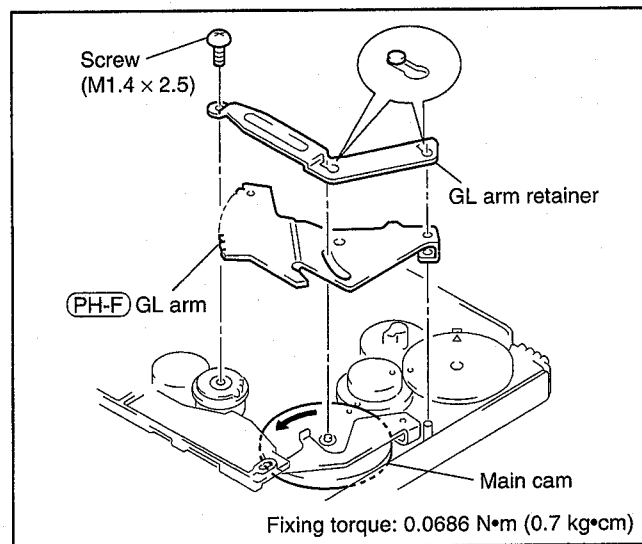
- Removing: ① → ② → ③ → ④
- Attaching : ④ → ③ → PH-G → ② → ①



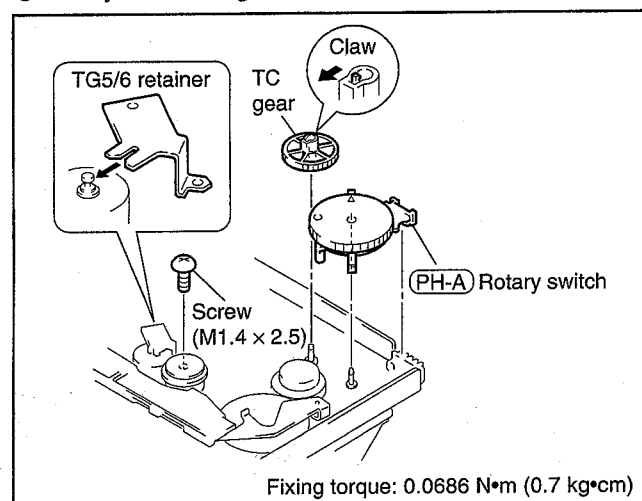
④. TG3/4, TG5/6 catcher block assembly and pinch cam gear.



⑤. GL arm retainer and GL arm.



⑥. Rotary switch, TC gear and TG5/6 retainer.

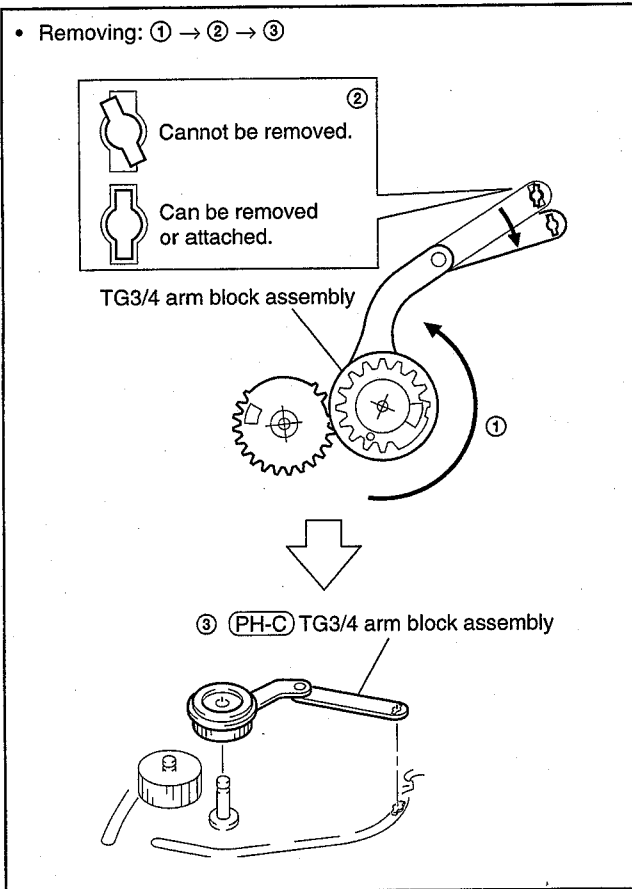




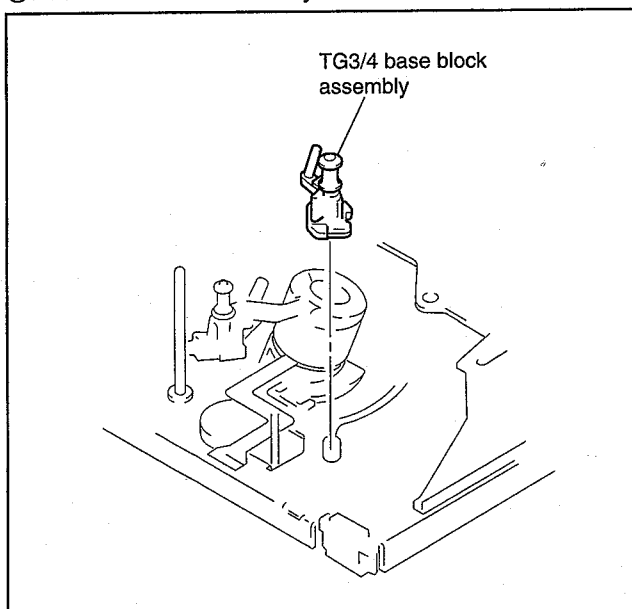
⑦. Set the **LOADING** position. (Refer to page 5-3)

⑧. TG3/4 arm block assembly.

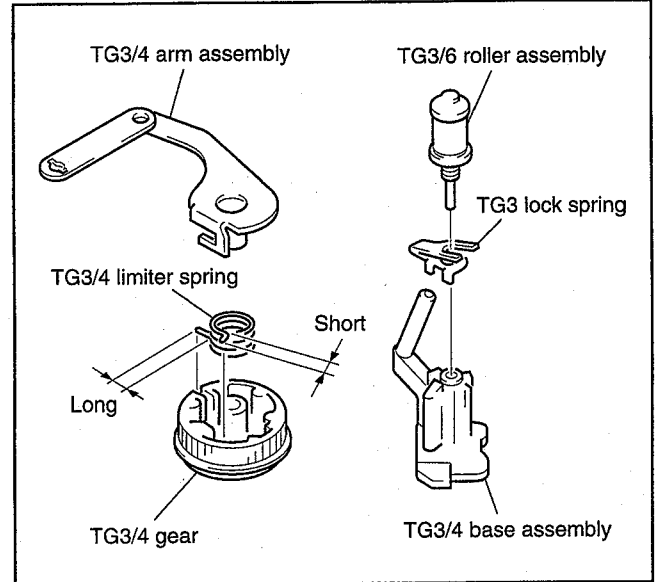
• Removing: ① → ② → ③



⑨. TG3/4 base block assembly.



⑩. TG3/4 arm assembly, TG3/4 limiter spring, TG3/4 gear, TG3/6 roller assembly, TG3 lock spring and TG3/4 base assembly.



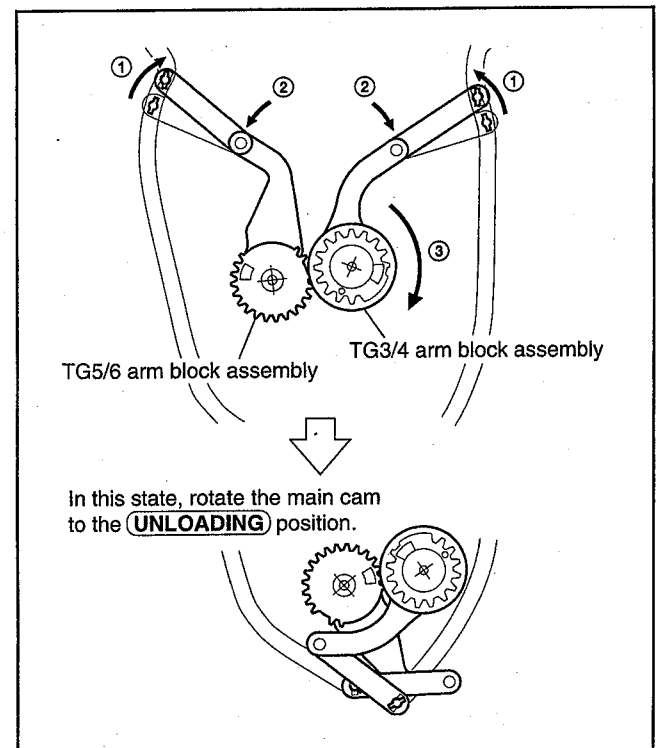
## 2. Attaching

①. Set the **LOADING** position. (Refer to page 5-3)

②. TG3/4 arm assembly, TG3/4 limiter spring, TG3/4 gear, TG3/6 roller assembly, TG3 lock spring and TG3/4 base assembly.

③. TG3/4 base block assembly.

④. TG3/4 arm block assembly.



⑤. Attach the parts in the order of ⑥ → ⑤ → ④ → ③ → ②.

⑥. Adjust them according to the flowchart (START-3) on page 5-43.

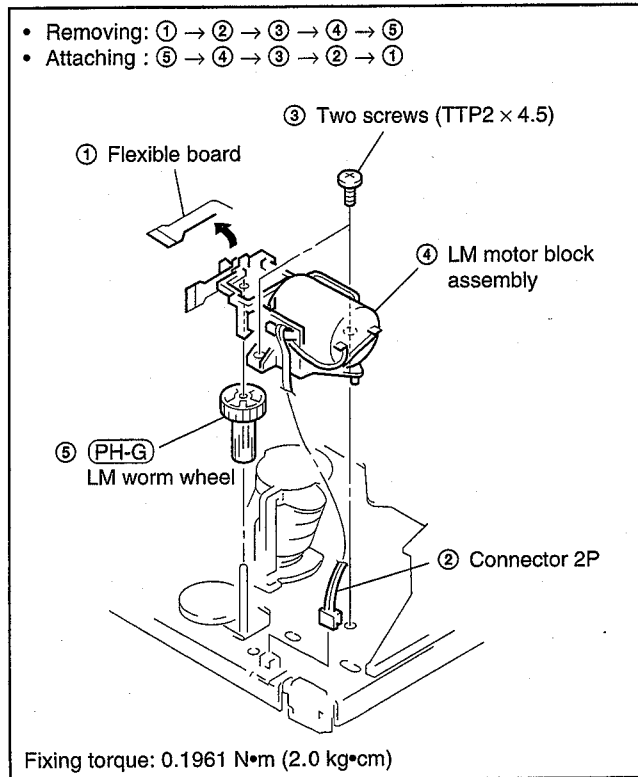
## 5-27. TG5/6 ARM BLOCK ASSEMBLY (TG5/6 ARM ASSEMBLY, TG5/6 LIMITER SPRING AND TG5/6 GEAR), TG5/6 BASE BLOCK ASSEMBLY (TG5/6 BASE ASSEMBLY)

### 1. Removing

①. Set the **UNLOADING** position. (Refer to page 5-3)

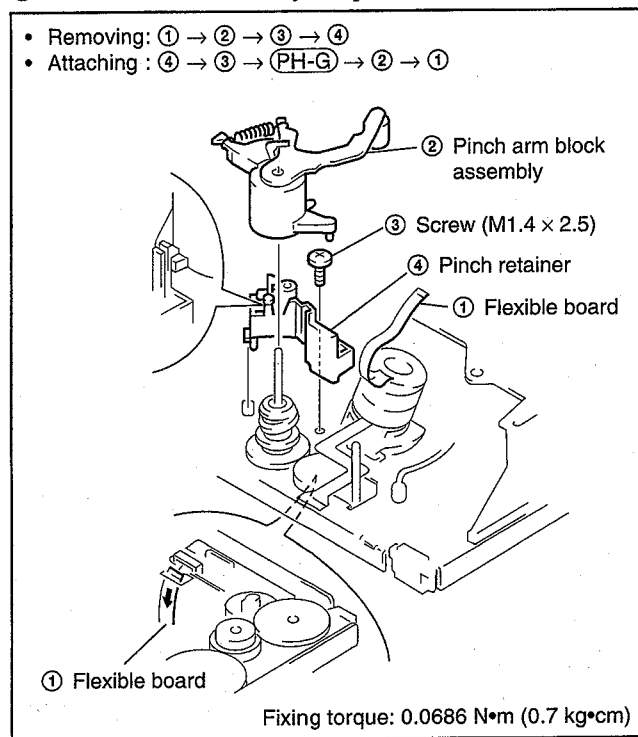
②. LM motor block assembly and LM worm wheel.

- Removing: ① → ② → ③ → ④ → ⑤
- Attaching : ⑤ → ④ → ③ → ② → ①

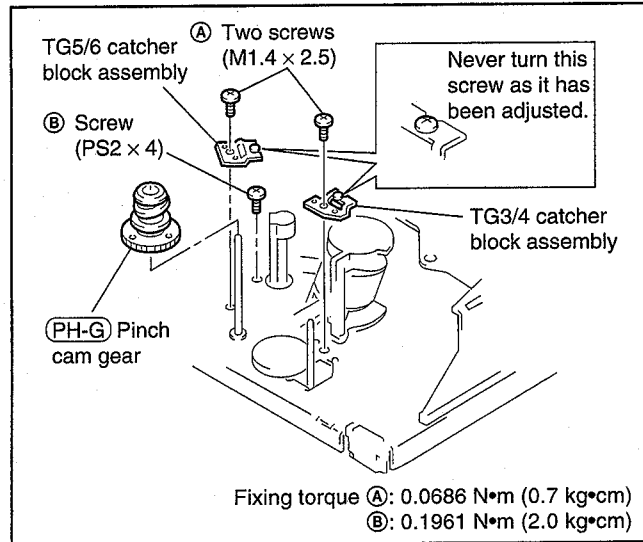


③. Pinch arm block assembly and pinch retainer.

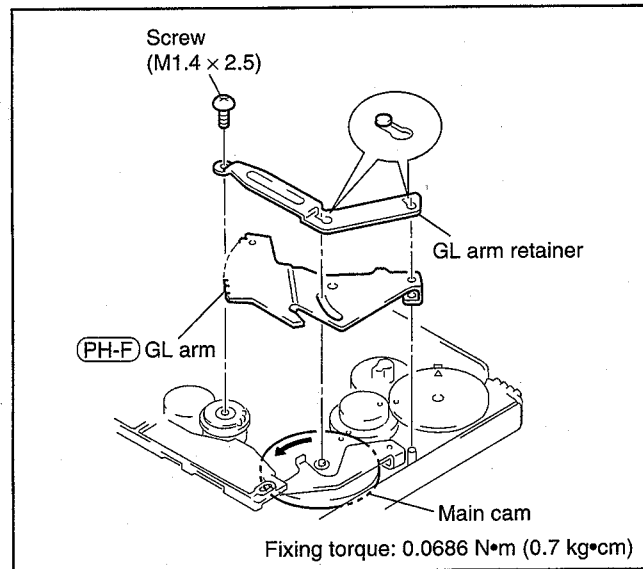
- Removing: ① → ② → ③ → ④
- Attaching : ④ → ③ → PH-G → ② → ①



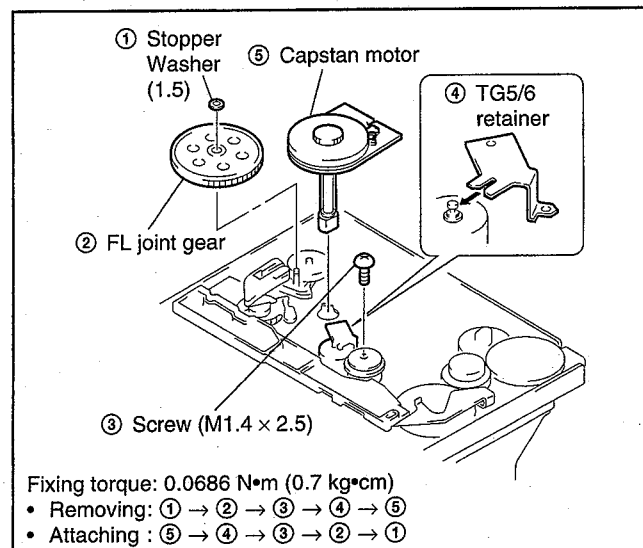
④. TG3/4, TG5/6 catcher block assembly, screw of capstan motor and pinch cam gear.



⑤. GL arm retainer and GL arm.



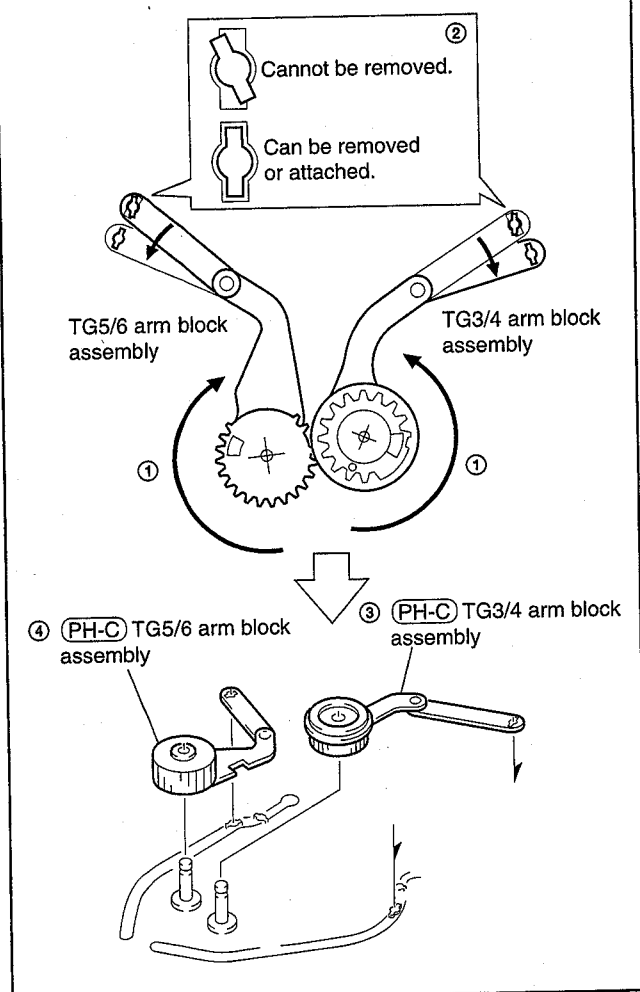
⑥. FL joint gear, capstan motor and TG5/6 retainer.



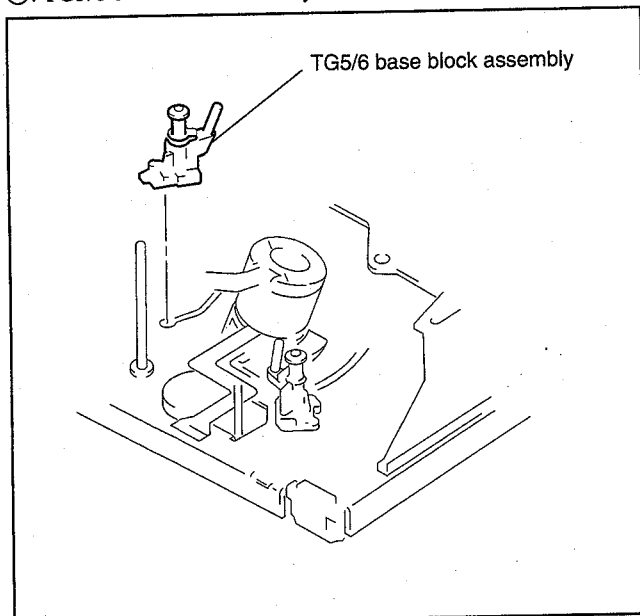
⑦. Set the **LOADING** position. (Refer to page 5-3)

⑧. TG3/4 arm block assembly and TG5/6 arm block assembly.

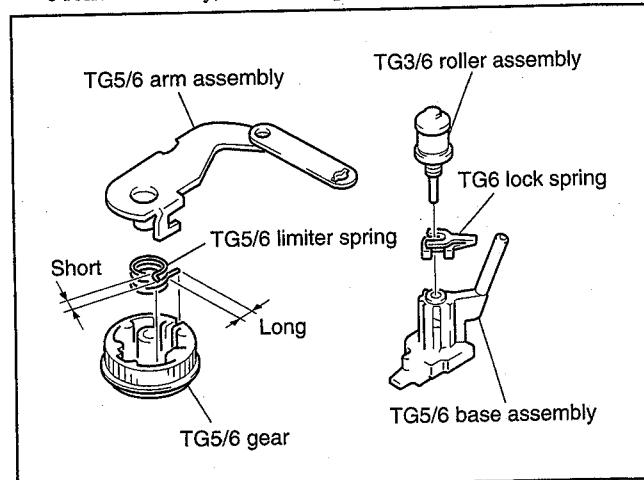
• Removing: ① → ② → ③ → ④



⑨. TG5/6 base block assembly.



⑩. TG5/6 arm assembly, TG5/6 limiter spring, TG5/6 gear, TG3/6 roller assembly, TG6 lock spring and TG5/6 base assembly.



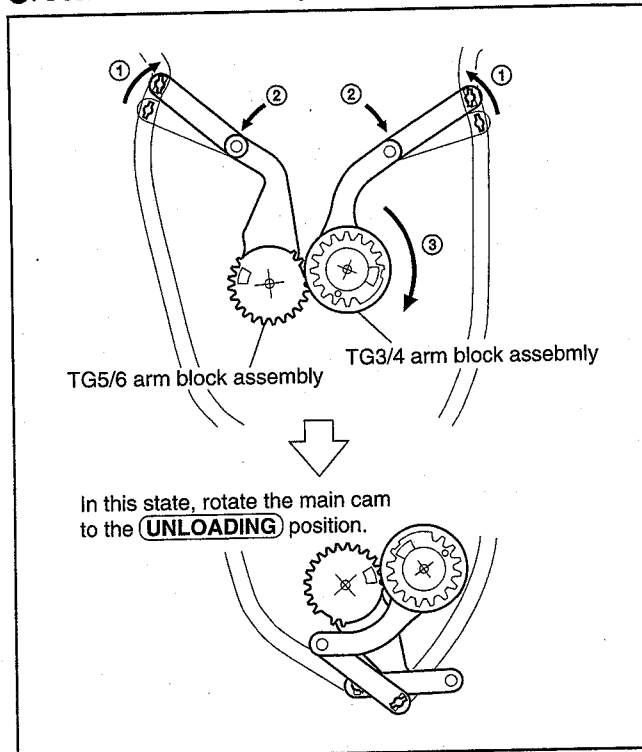
## 2. Attaching

①. Set the **LOADING** position. (Refer to page 5-3)

②. TG5/6 arm assembly, TG5/6 limiter spring, TG5/6 gear, TG3/6 roller assembly, TG6 lock spring and TG5/6 base assembly.

③. TG5/6 base block assembly.

④. TG3/4 arm block assembly and TG5/6 arm block assembly.

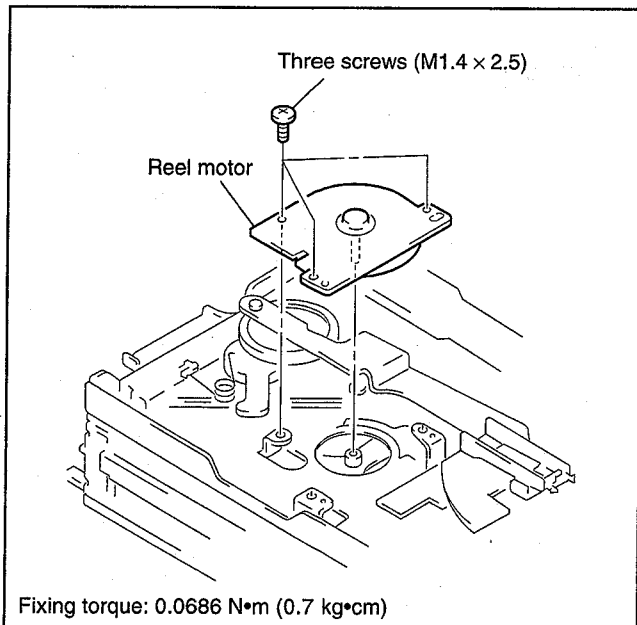


⑤. Attach the parts in the order of ⑥ → ⑤ → ④ → ③ → ②.

⑥. Adjust them according to the flowchart (START-3) on page 5-43.

## 5-28. REEL MOTOR

### • Removing/Attaching

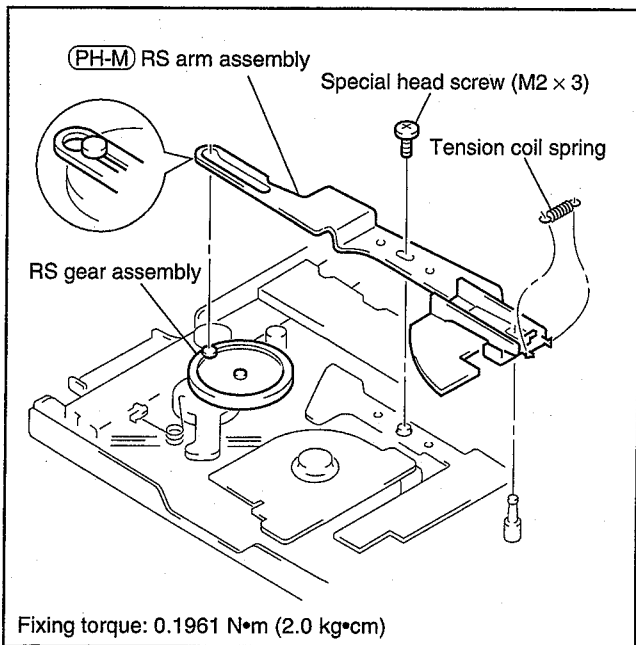


## 5-29. RS ARM ASSEMBLY

### 1. Removing

①. Set the (S/L cassette) position. (Refer to page 5-2)

②. RS arm assembly.



### 2. Attaching

• Attach the parts in the order of ① → ②.

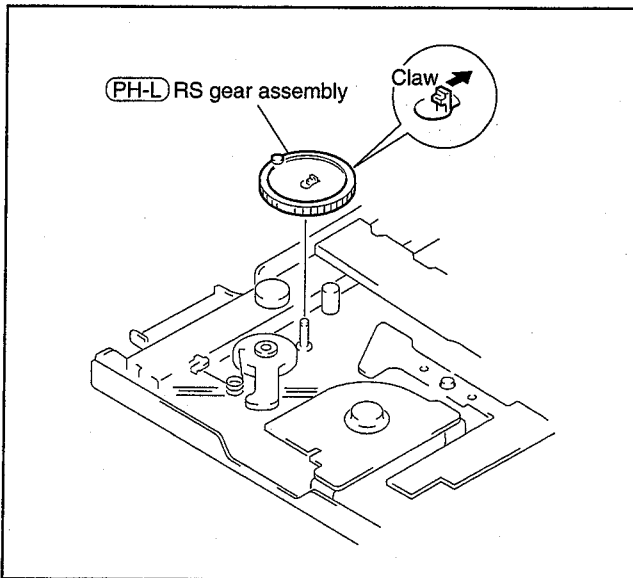
## 5-30. RS GEAR ASSEMBLY, MIC PRESS SPRING AND MIC LEVER

### 1. Removing

①. Set the (S/L cassette) position. (Refer to page 5-2)

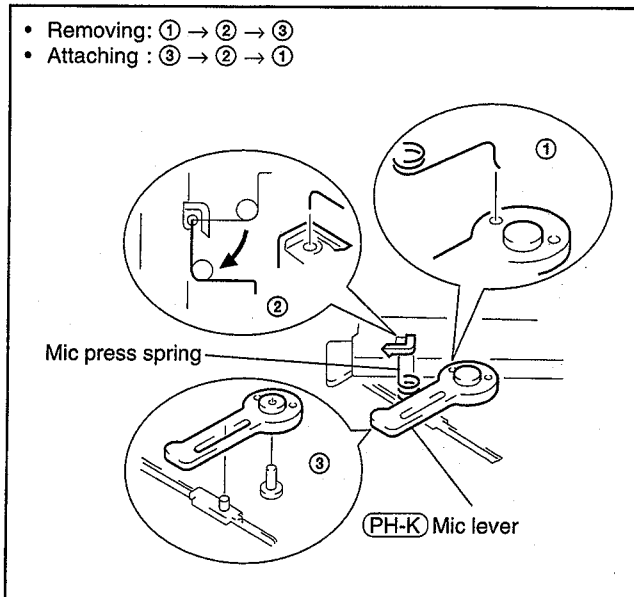
②. RS arm assembly. (Refer to 5-29)

③. RS gear assembly.



④. Mic press spring and Mic lever.

- Removing: ① → ② → ③
- Attaching : ③ → ② → ①



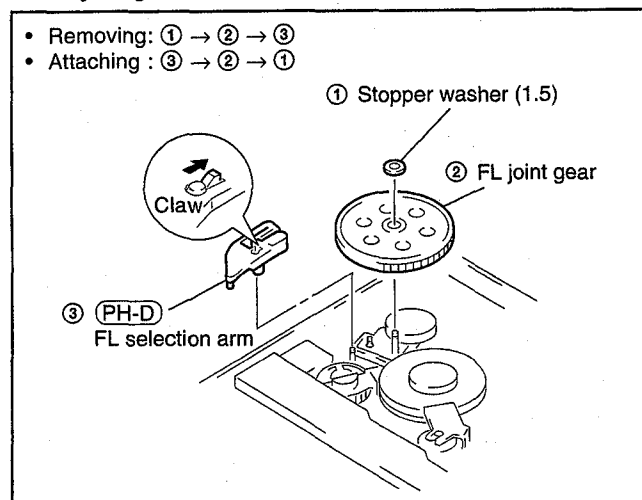
### 2. Attaching

• Attach the parts in the order of ① → ④ → ③ → ②.

## 5-31. RACK JOINT GEAR, RACK HOLDER, MIC HOLDER, RACK (LC) AND RACK (SC)

### 1. Removing

#### ①. FL joint gear, TG7 selection arm.

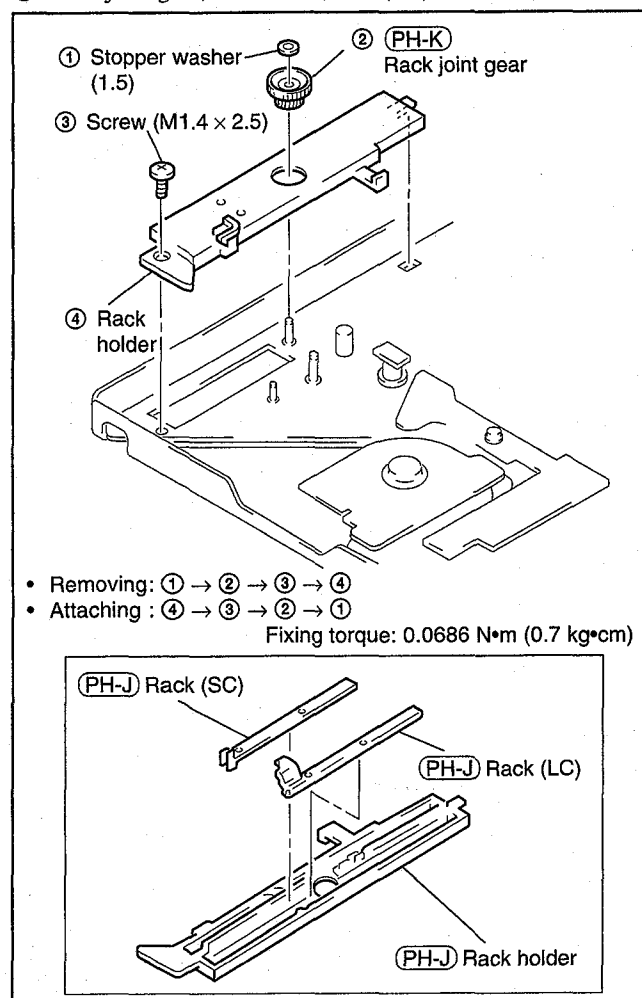


#### ②. Set the **S/L cassette** position. (Refer to page 5-2)

#### ③. RS arm assembly. (Refer to 5-29)

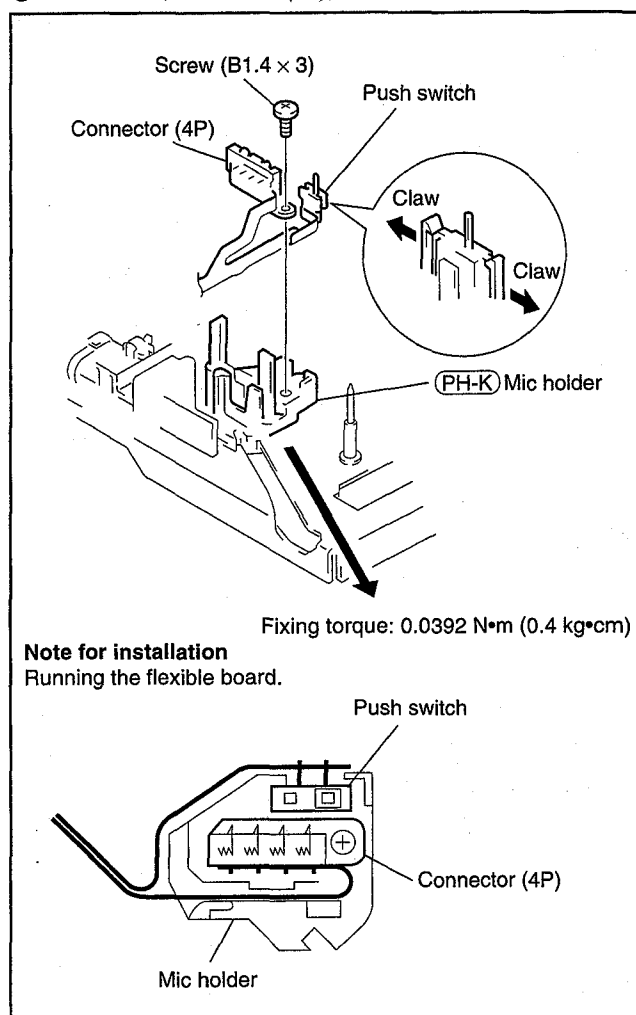
#### ④. RS gear assembly, Mic press spring and Mic lever. (Refer to 5-30)

#### ⑤. Rack joint gear, rack holder, rack (LC) and rack (SC).



#### ⑥. FL block assembly. (Refer to page 5-2)

#### ⑦. Push switch, Connector (4P), Mic holder.



### 2. Attaching

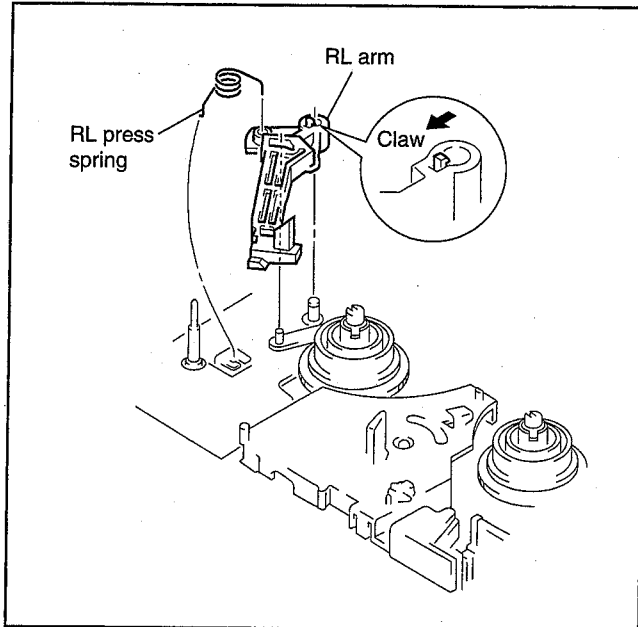
- Attach the parts in the order of ② → ⑦ → ⑥ → ⑤ → ④ → ③ → ①.

## 5-32. PLATE LINK ASSEMBLY

### 1. Removing

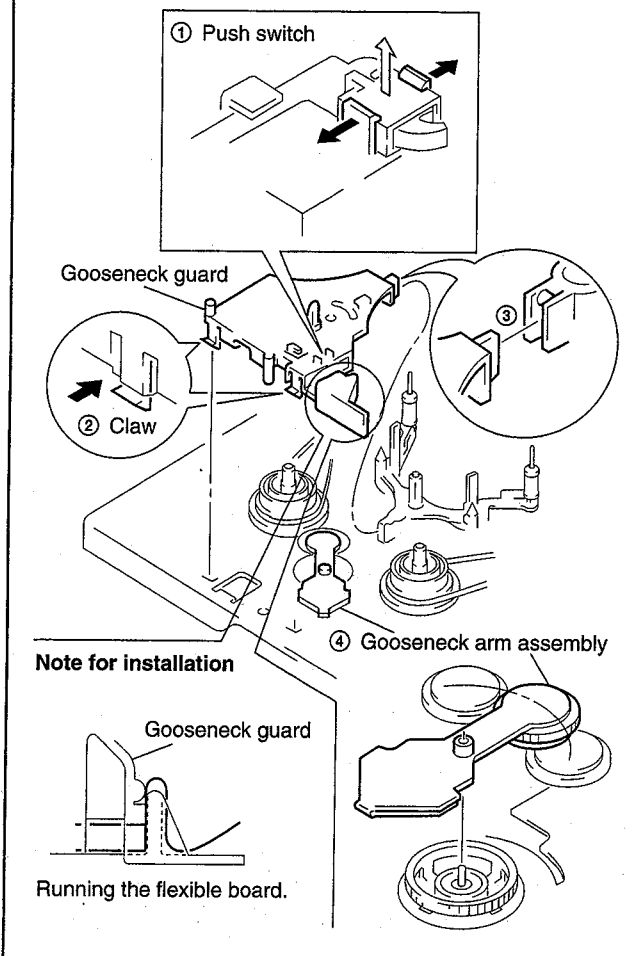
①. Set the **(L cassette)** position. (Refer to page 5-2)

②. RL arm.

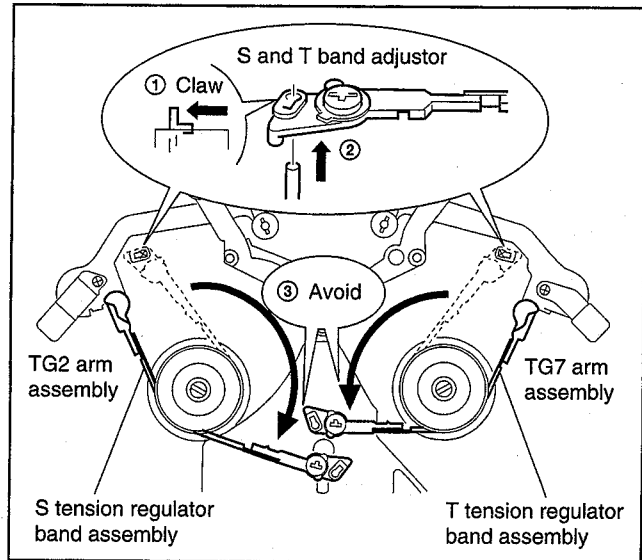


③. Gooseneck guard.

- Removing: ① → ② → ③ → ④
- Attaching : ④ → ③ → ② → ①

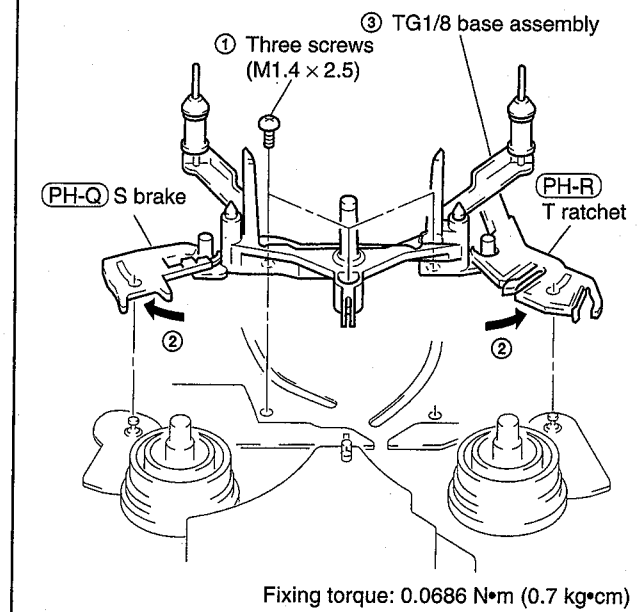


④. S and T band adjustor.

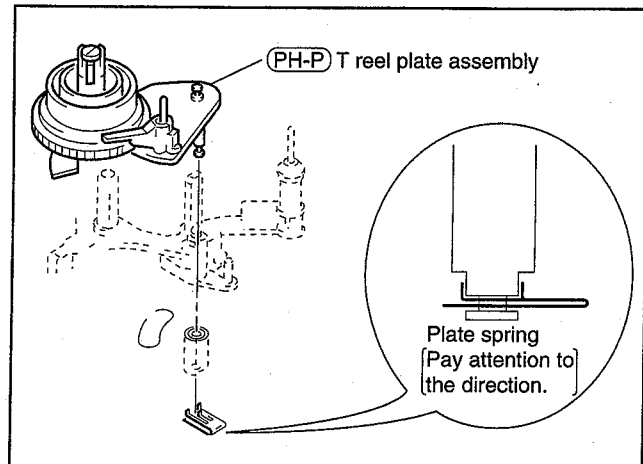


⑤. TG1/8 base assembly. (S brake and T ratchet)

- Removing: ① → ② → ③
- Attaching : ② → ③ → ①

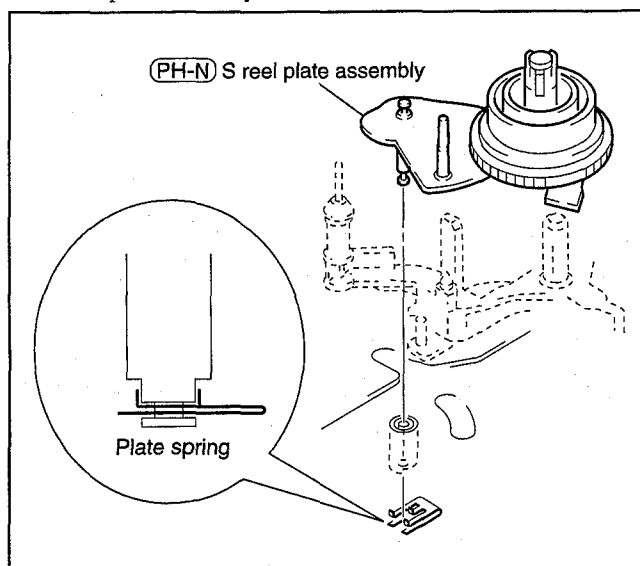


⑥. T reel plate assembly.



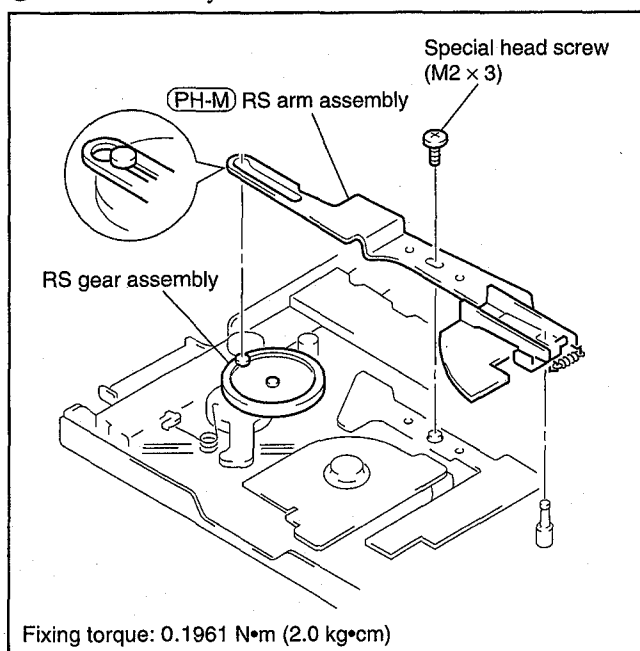


⑦. S reel plate assembly.

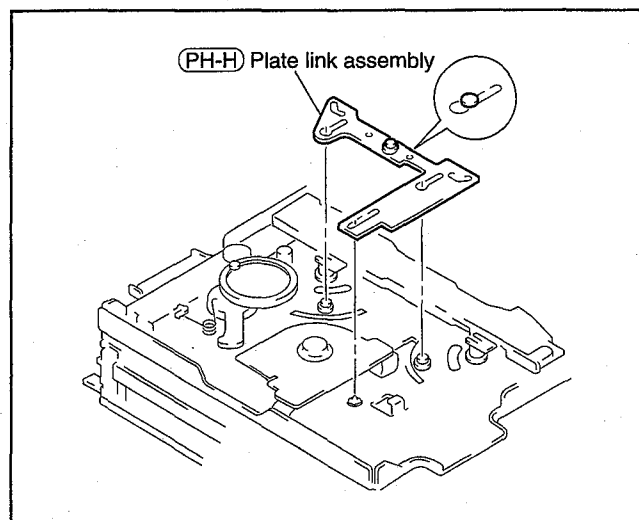


⑧. Set the **(S/L cassette)** position. (Refer to page 5-2)

⑨. RS arm assembly.



⑩. Plate link assembly.

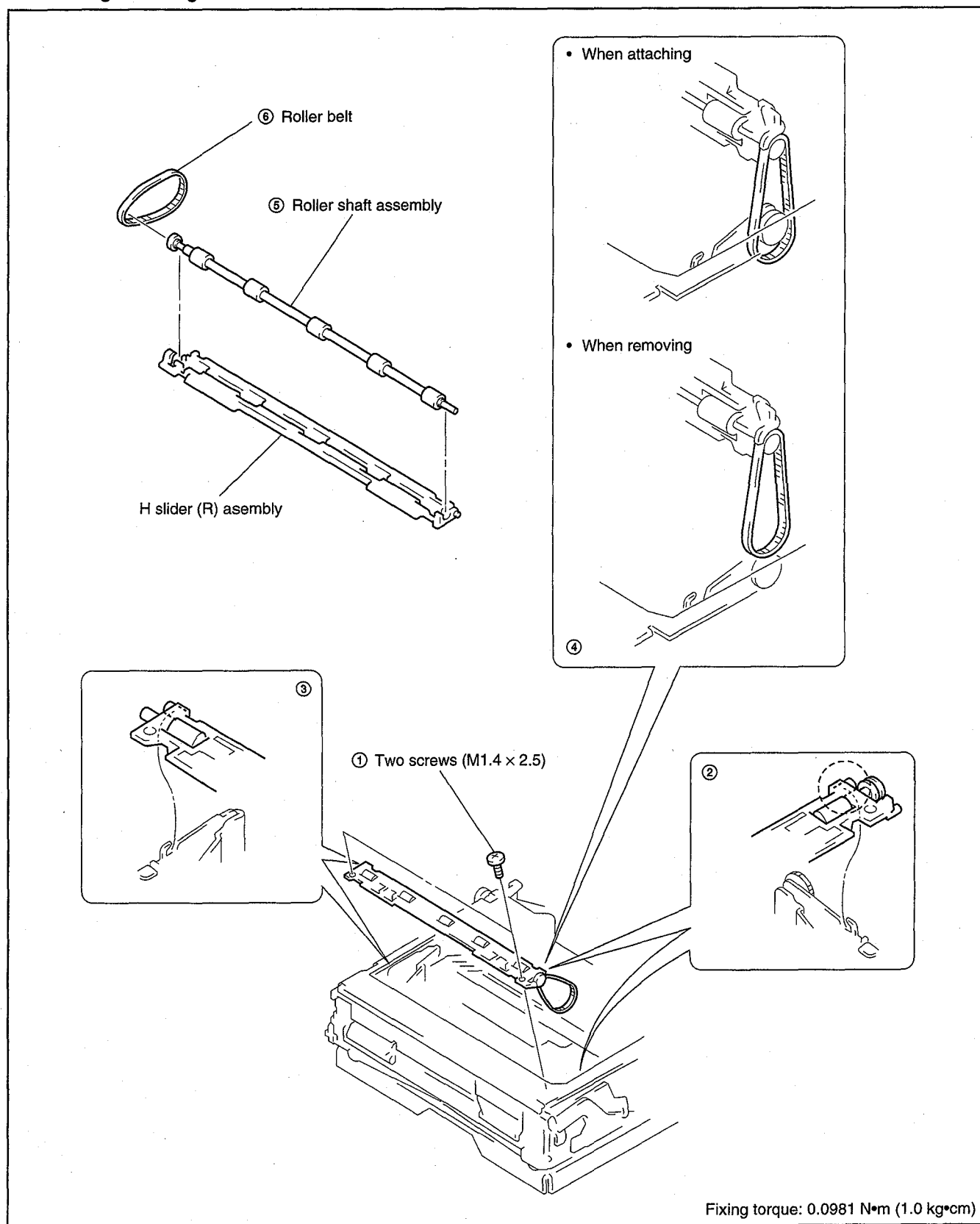


2. Attaching

- ①. Attach the parts in the order of ⑧ → ⑩ → ⑨ → ⑦ → ⑥ → ⑤ → ① → ④ → ③ → ②.
- ②. Adjust them according to the flowchart (START-1) on page 5-43.

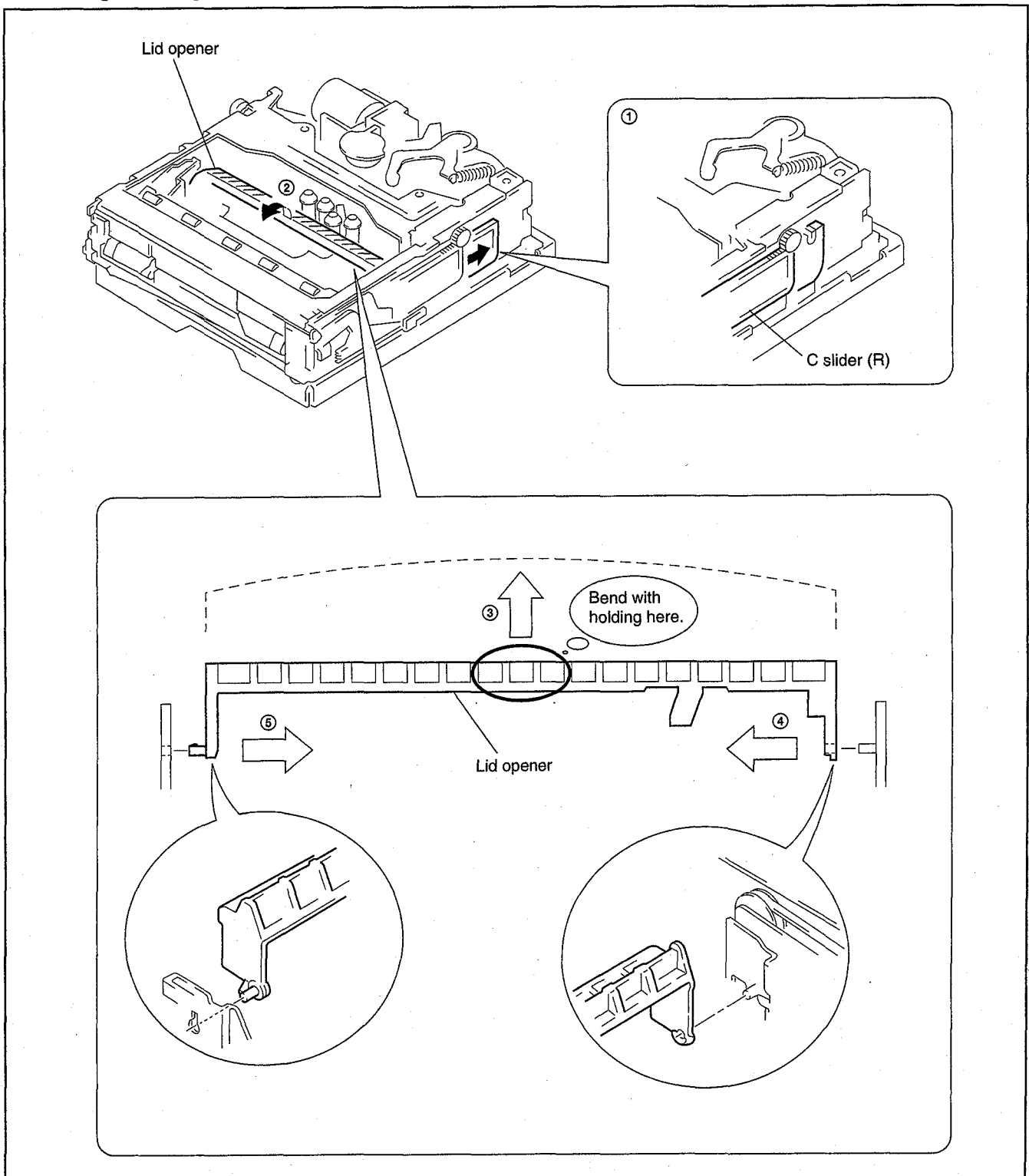
## 5-33. ROLLER SHAFT ASSEMBLY AND ROLLER BELT

### • Removing/Attaching



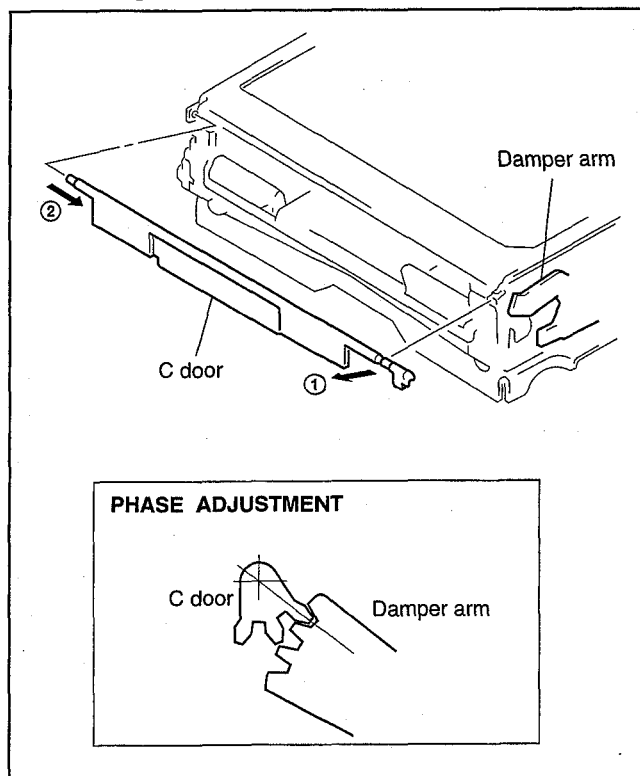
## 5-34. LID OPENER

### • Removing/Attaching



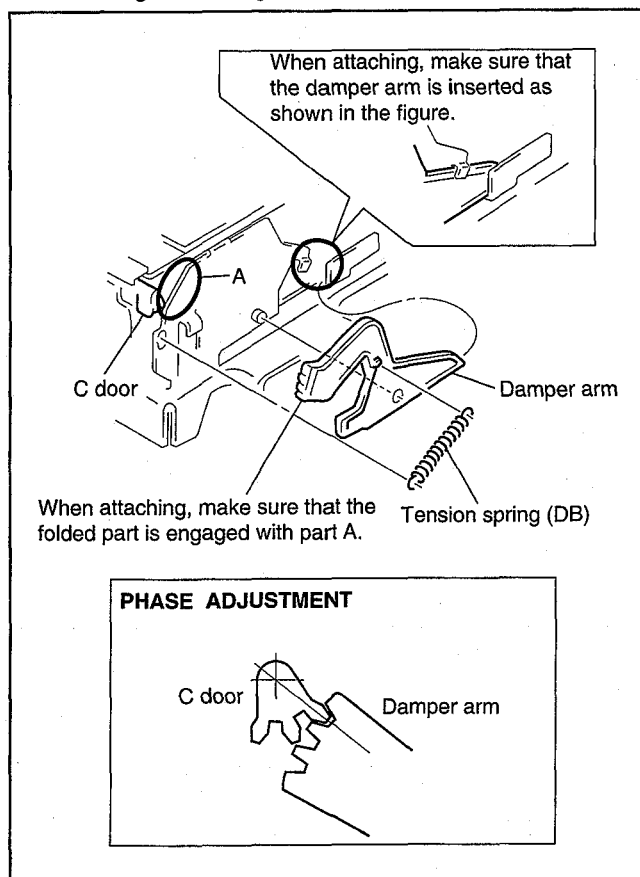
## 5-35. C DOOR

### • Removing/Attaching



## 5-36. DAMPER ARM AND TENSION SPRING (DB)

### • Removing/Attaching

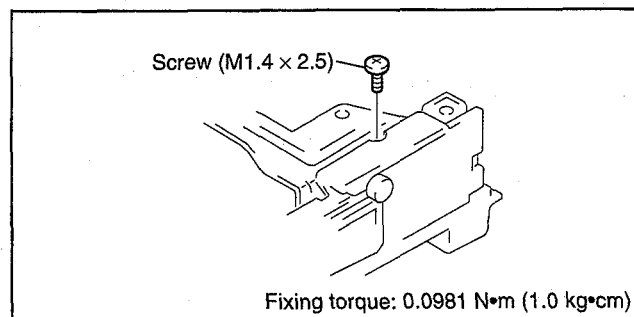


## 5-37. GEAR (A), GEAR (B) AND C WORM

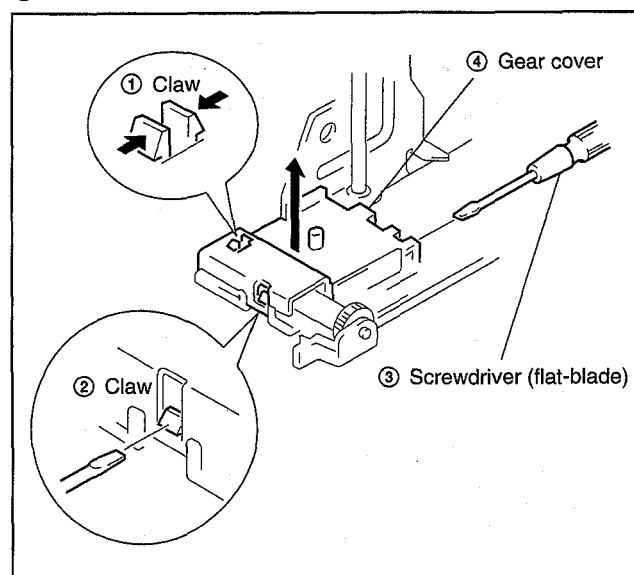
### 1. Removing

①. FL block assembly. (Refer to page 5-2)

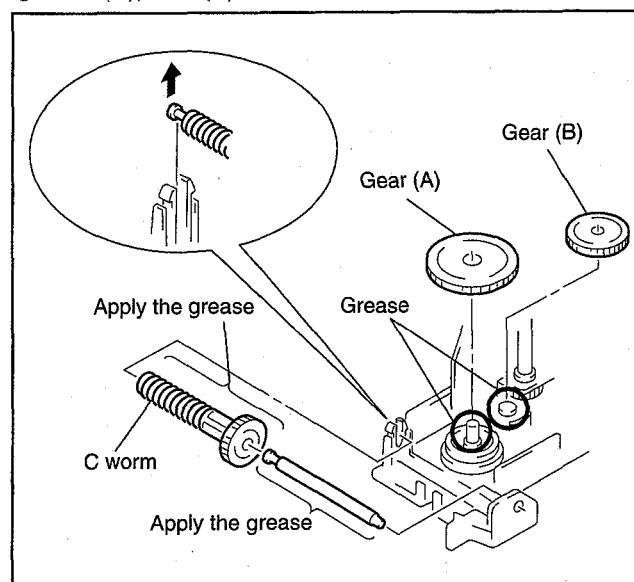
②. Screw. (M1.4 × 2.5)



③. Gear cover.



④. Gear (A), Gear (B) and C worm.

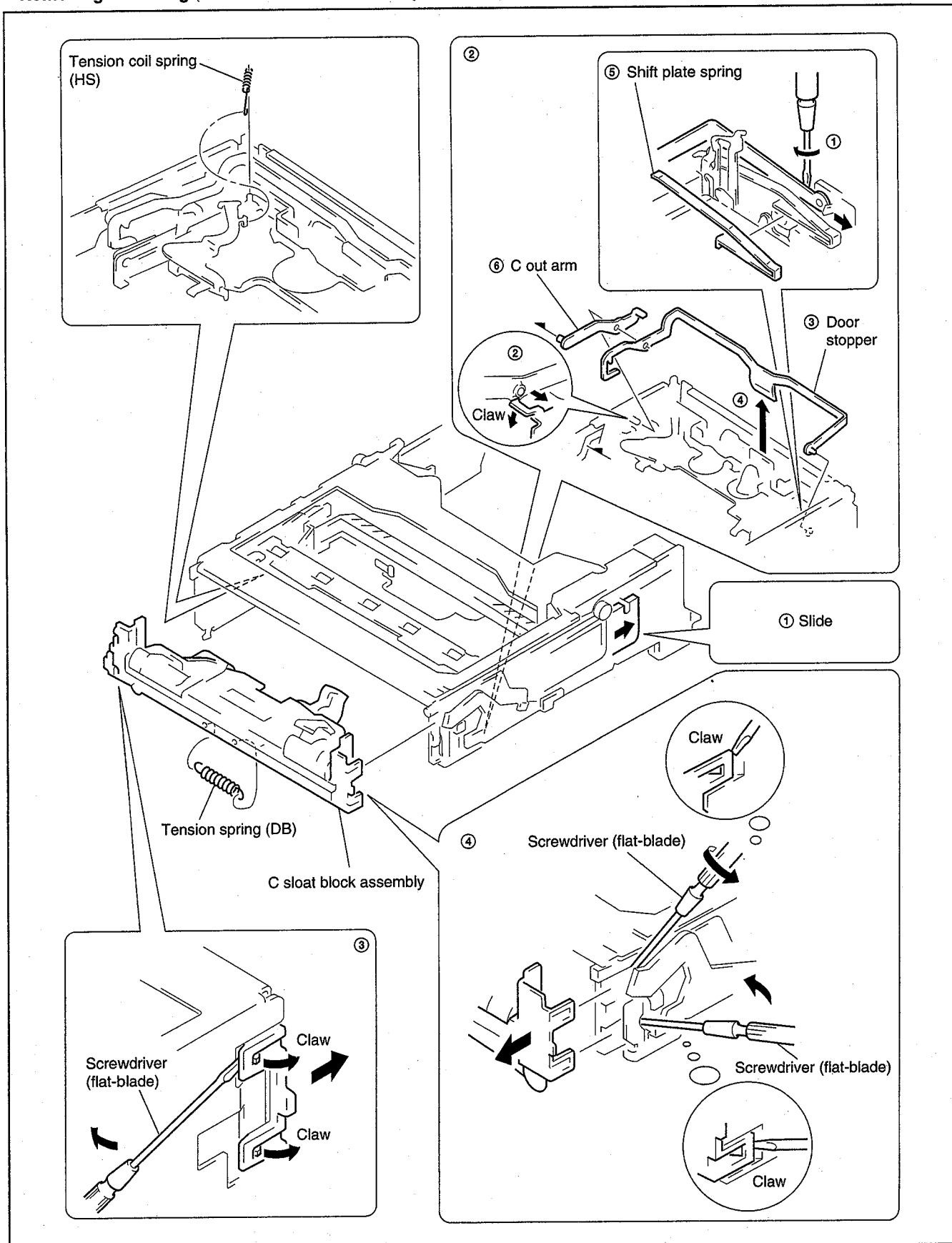


### 2. Attaching

• Attach the parts in the order of ④ → ③ → ② → ①.

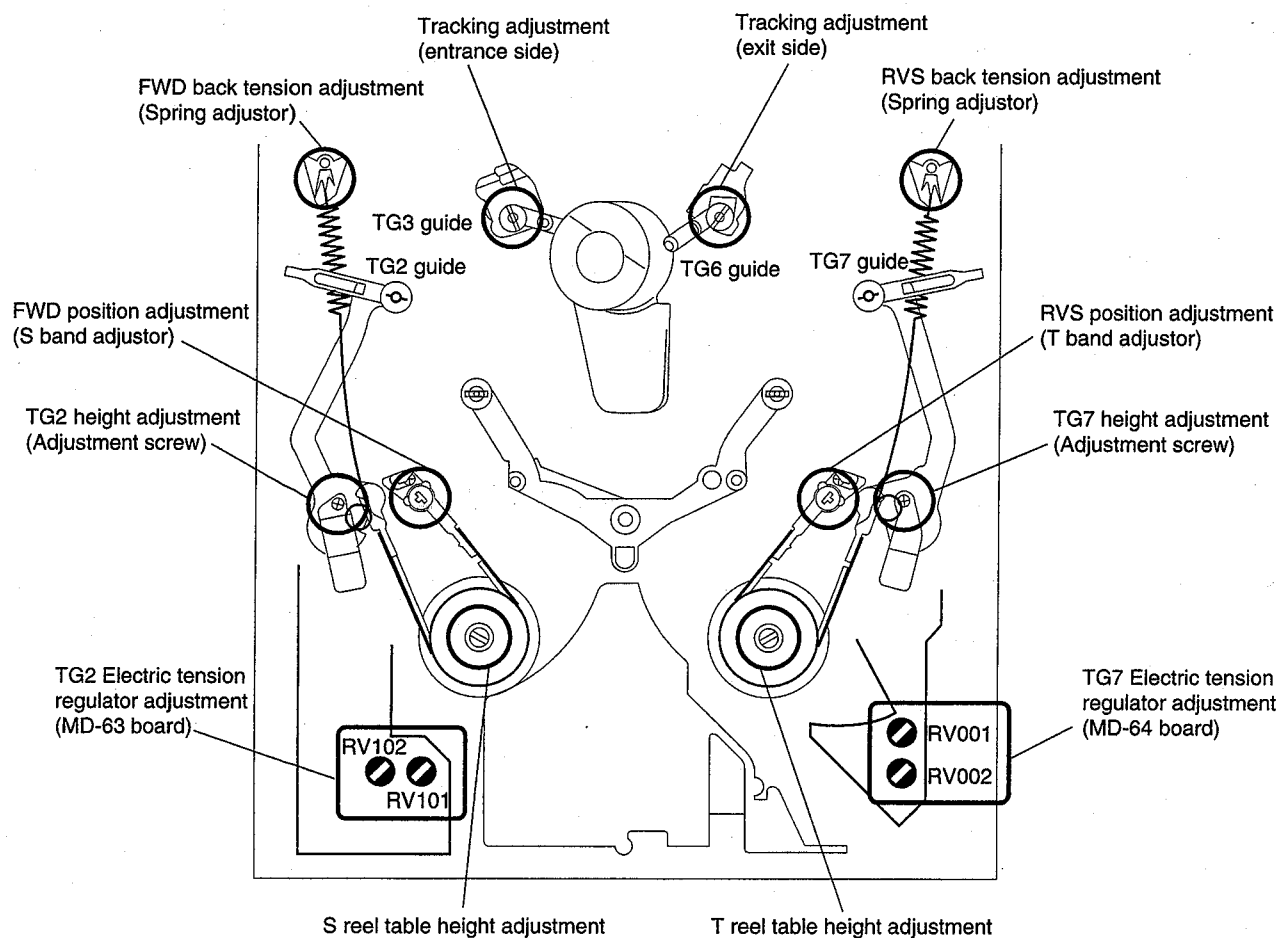
# 5-38. TENSION COIL SPRING (HS), TENSION SPRING (DB), SHIFT PLATE SPRING AND C SLOAT BLOCK ASSEMBLY

- **Removing/Attaching** (Remove the FL block assembly. (Refer to page 5-2))



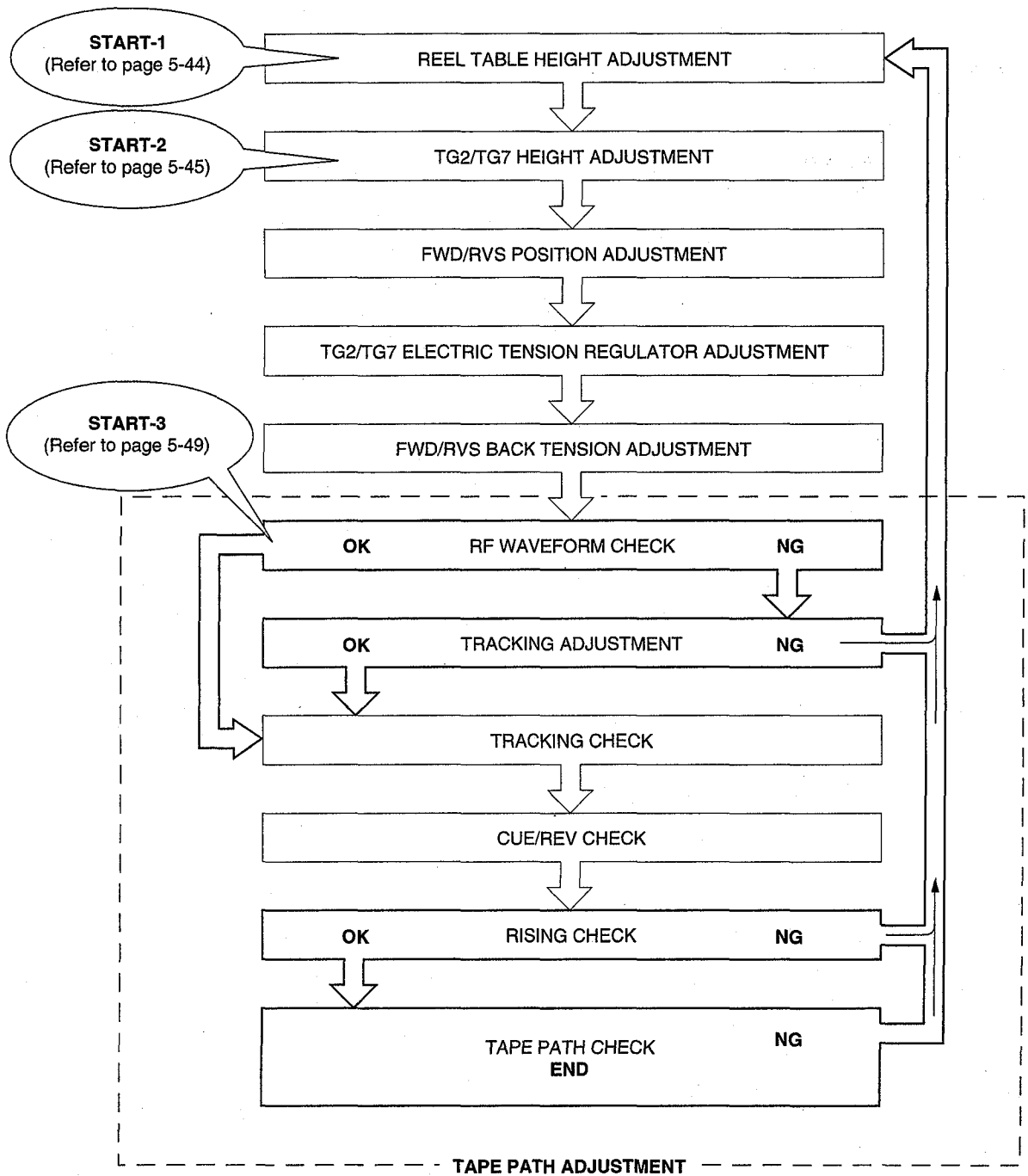
## 5-1-6. ADJUSTMENTS AND CHECKS

### 6-1. ADJUSTMENT POSITION





## 6-2. ADJUSTMENT ORDER



## 6-3. ADJUSTMENT AND CHECKING METHOD

### 6-3-1. REEL TABLE HEIGHT ADJUSTMENT

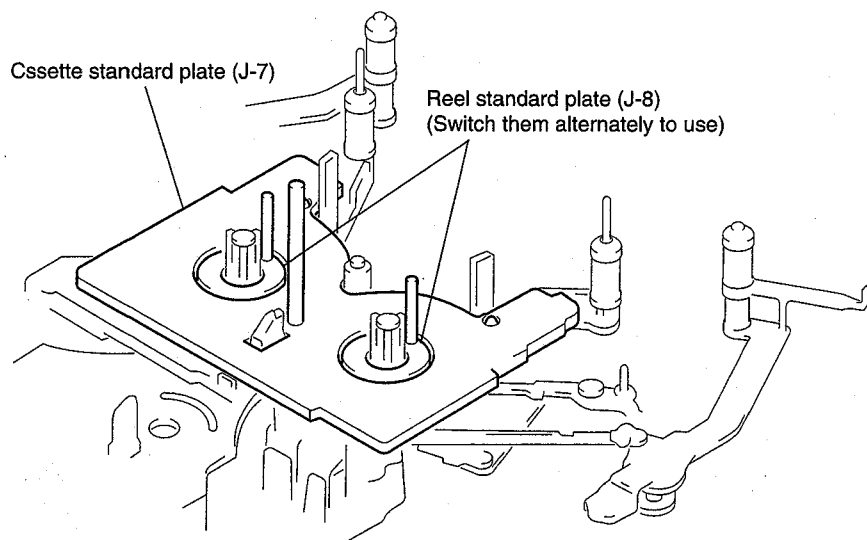
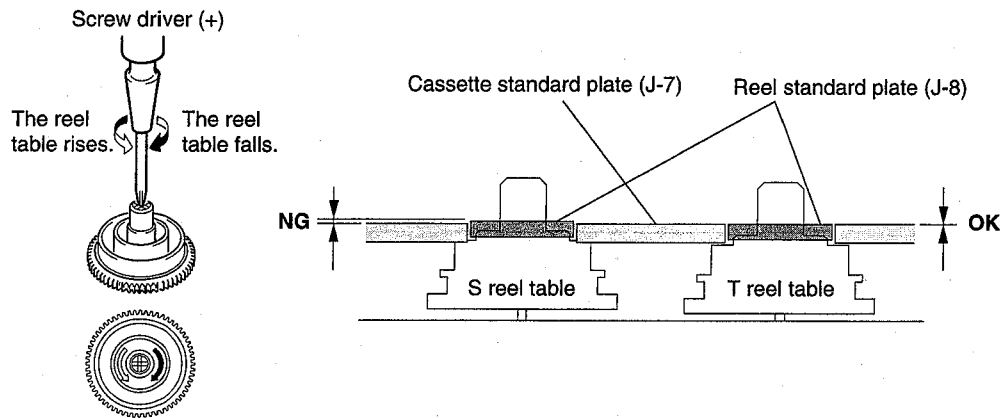
#### 1. Preparation before adjustment

FL block: Remove.

Position : **LOADING** / **S cassette**

Jig used : Cassette standard plate (J-7), Reel standard plate (J-8) and screwdriver (+)

#### 2. Adjusting



## 6-3-2. TG2/TG7 HEIGHT ADJUSTMENT

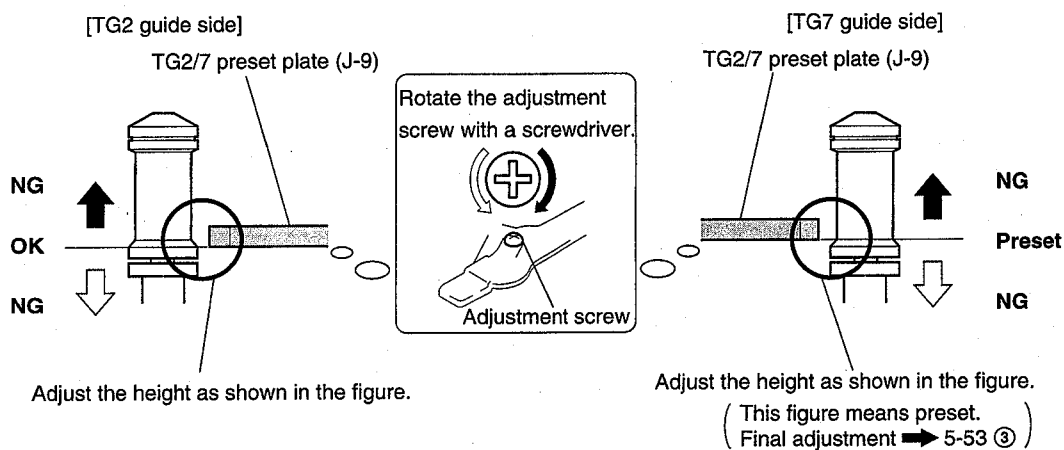
### 1. Preparation before adjustment

FL block: Remove.

Position : **LOADING** / **S cassette**

Jig used : Cassette standard plate (J-7), TG2/7 preset plate (J-9) and screwdriver  
(For attaching jigs, refer to page 5-5)

### 2. Adjusting



## 6-3-3. FWD/RVS POSITION ADJUSTMENT

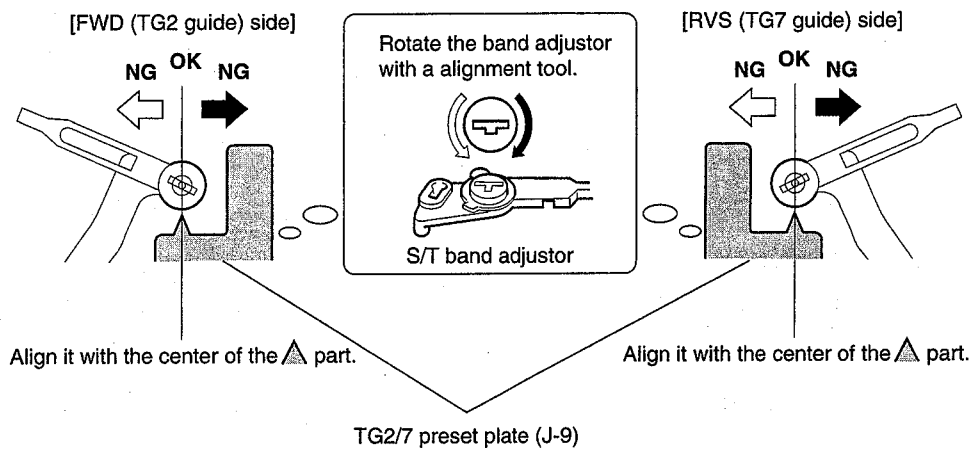
### 1. Preparation before adjustment

FL block: Remove.

Position : **LOADING** (The pinch roller should be stuck) / **S cassette**

Jig used : Cassette standard plate (J-7), TG2/7 preset plate (J-9) and screwdriver for tape path

### 2. Adjusting



## 6-3-4. TG2/TG7 ELECTRIC TENSION REGULATOR ADJUSTMENT

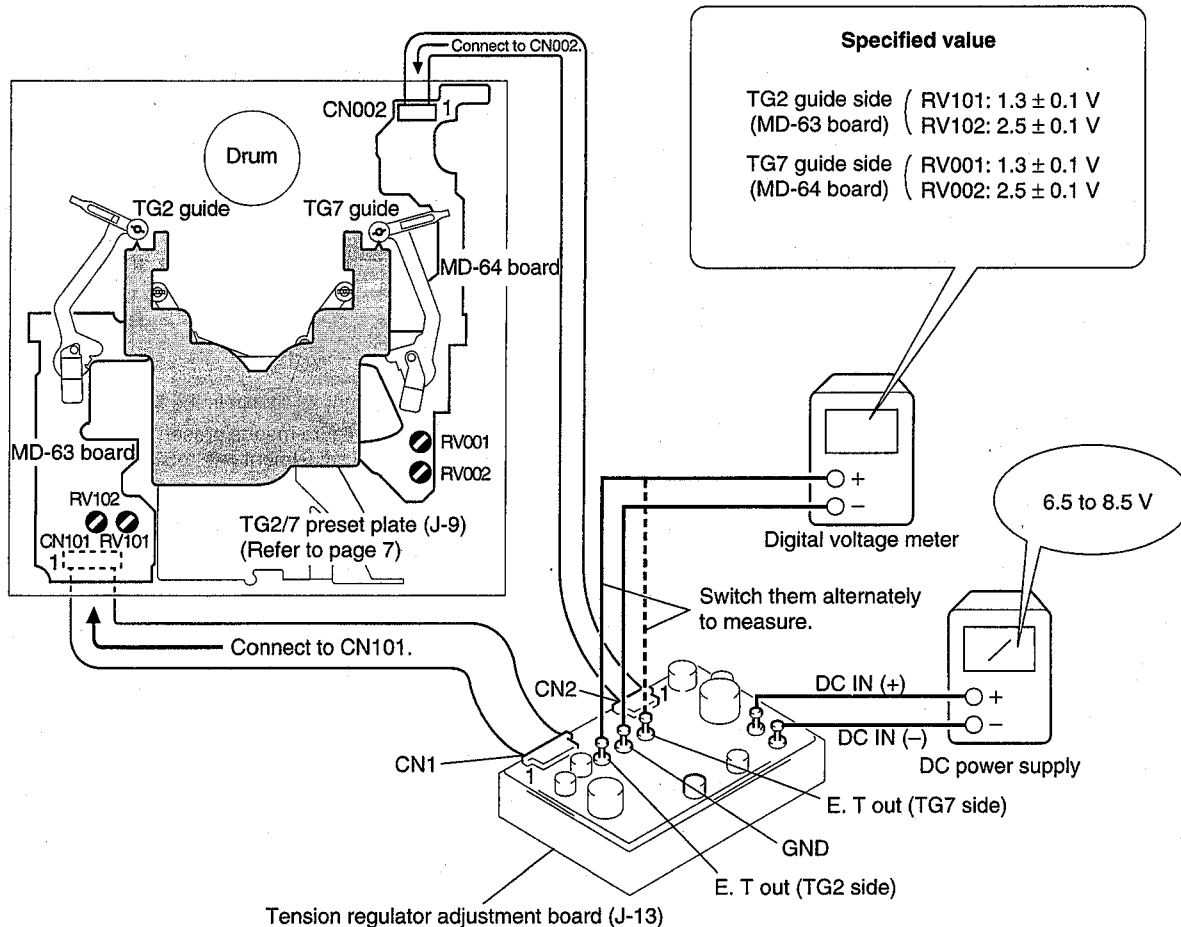
### 1. Preparation before adjustment

FL block: Remove.

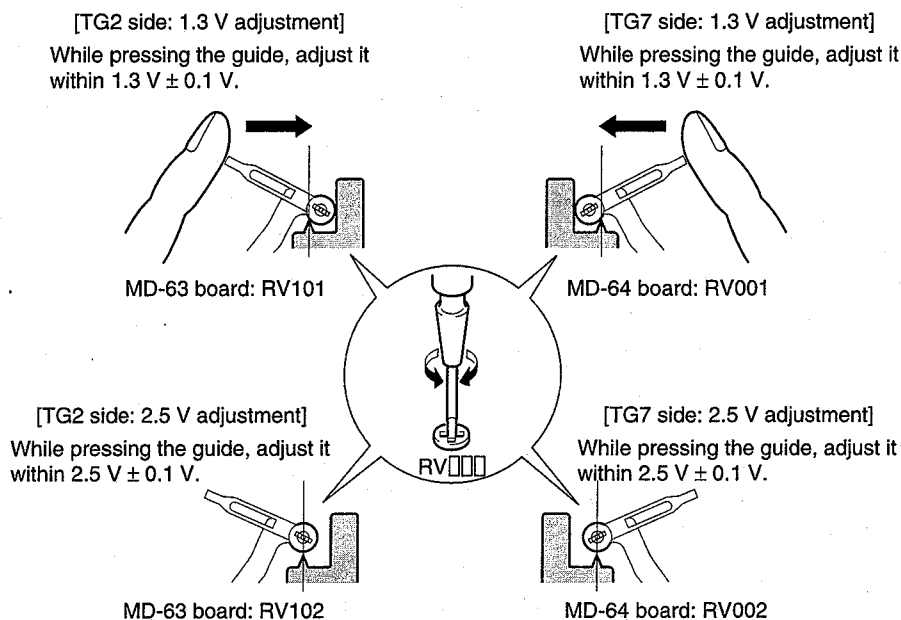
Position : **LOADING** (The pinch roller should be stuck) / **S cassette**

Jig used : Cassette standard plate (J-7), TG2/7 preset plate (J-9) and screwdriver for tape path  
(For attaching jigs, refer to page 5-5)

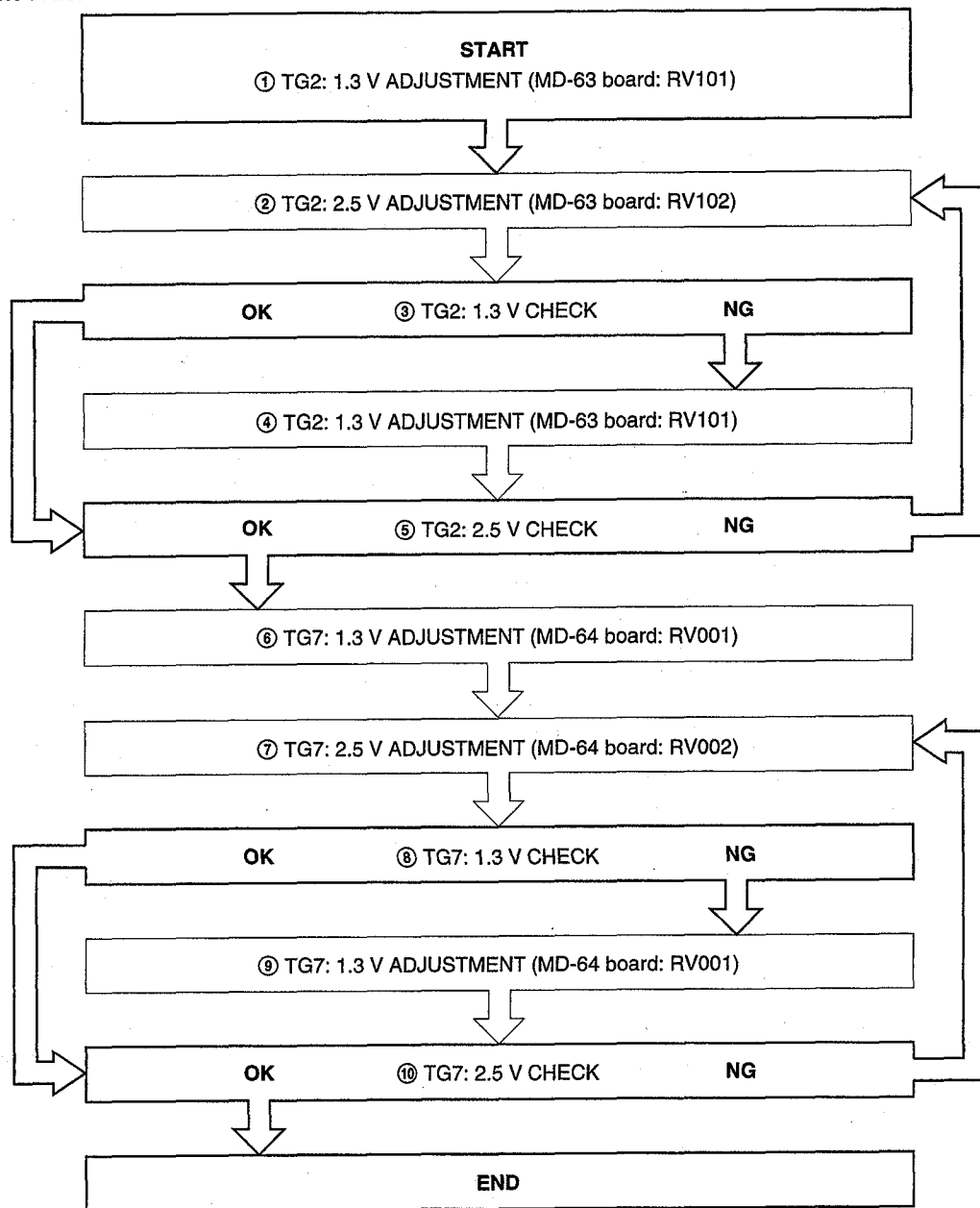
### 2. Connecting, setting, and adjusting methods



### 3. Adjusting



#### 4. Adjustment order



## 6-3-5. FWD/RVS BACK TENSION ADJUSTMENT

### 1. Preparation before adjustment

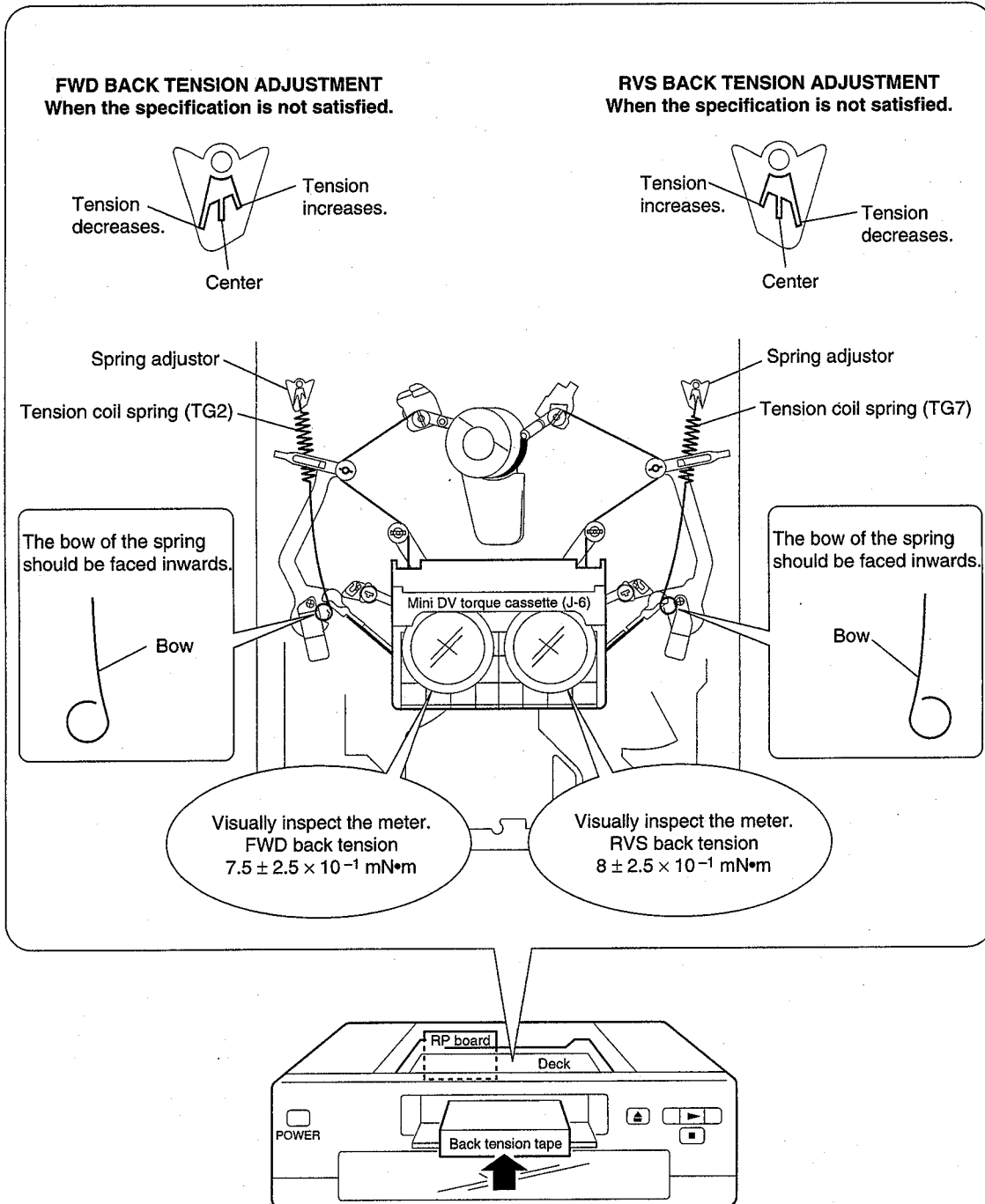
Mechanism deck: Install to the unit.

Jig used : Mini DV torque cassette (J-6), pinset (For change the hooking of spring)

### 2. Adjusting

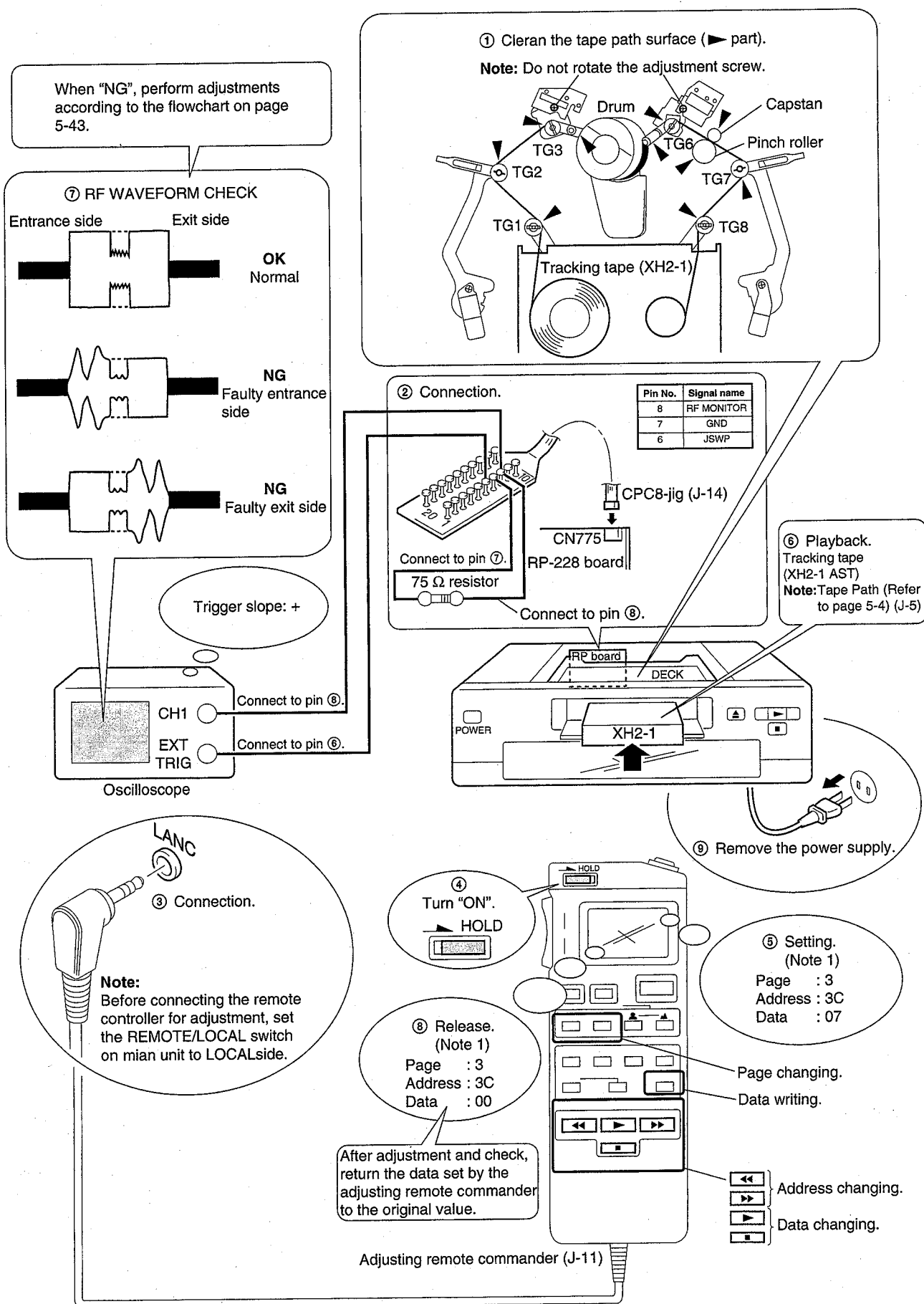
**Note:** At the FWD (TG2) side, measure the Mini DV torque cassette (J-6) in the FWD mode.

At the RVS (TG7) side, measure the Mini DV torque cassette (J-6) in the RVS mode.

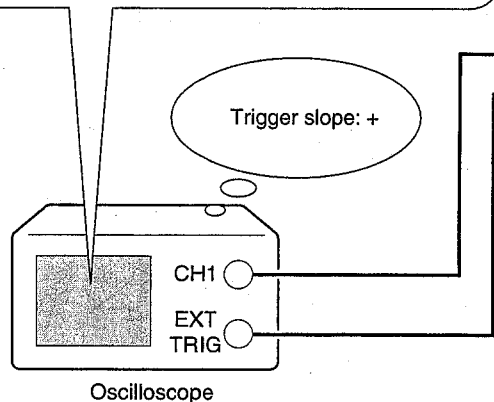
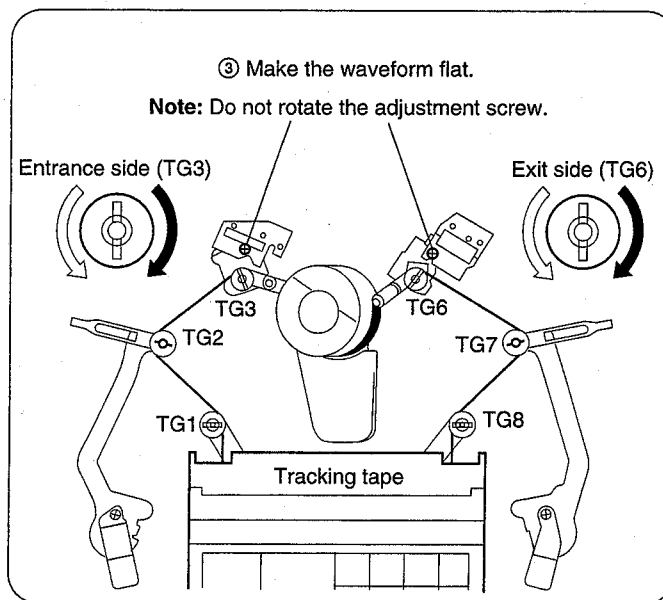
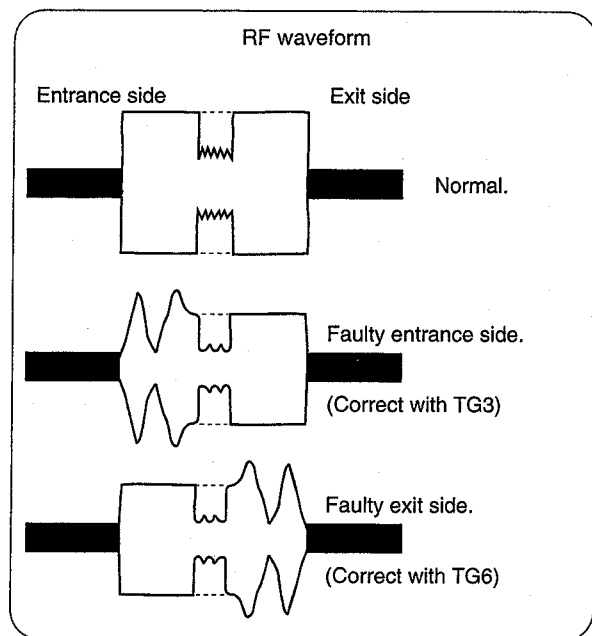




## 6-3-6. ADJUSTMENT PREPARATIONS AND RF WAVEFORM CHECK

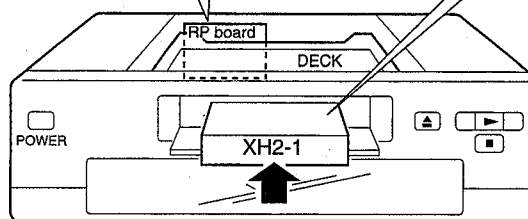


## 6-3-7. TRACKING ADJUSTMENT

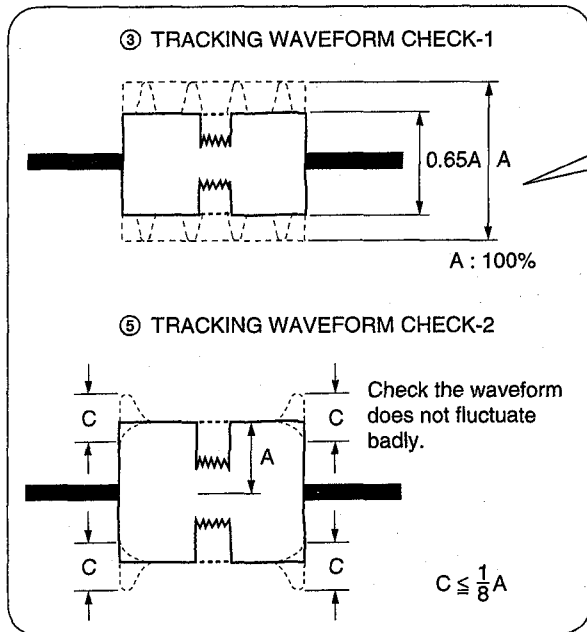


① Connection.  
Refer to ② Connection of 6-3-6. Adjustment preparations.

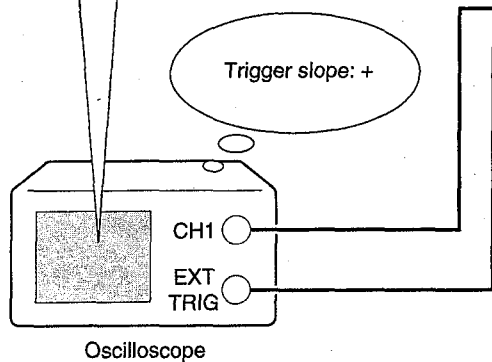
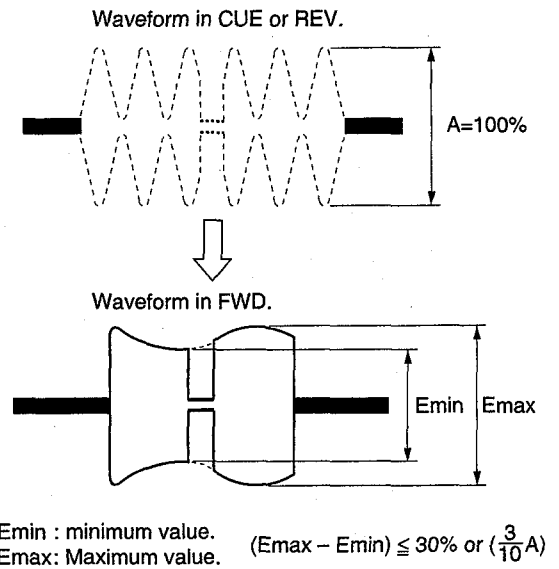
② Playback.  
Tracking tape (XH2-1 AST)  
**Note:** Tape Path (Refer to page 5-4) (J-5)



## 6-3-8. TRACKING CHECK



- ④ When the waveform's amplitude of CUE (or REV) is A (=100%), check the difference between the minimum amplitude (Emin) and the maximum amplitude (Emax) for FWD is 30% or less.

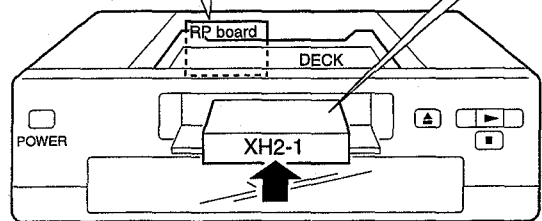


### ① Connection.

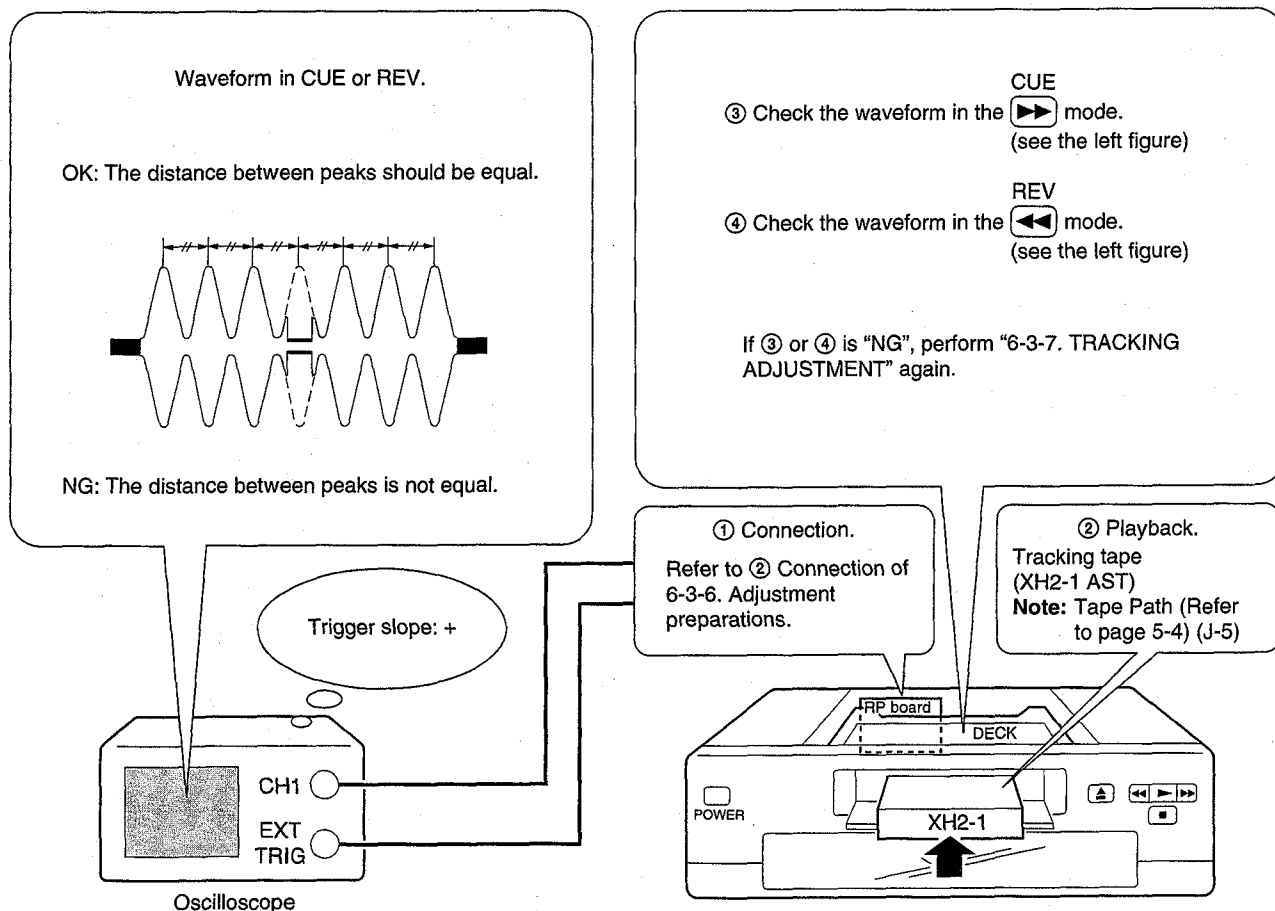
Refer to ② Connection of 6-3-6. Adjustment preparations.

### ② Playback.

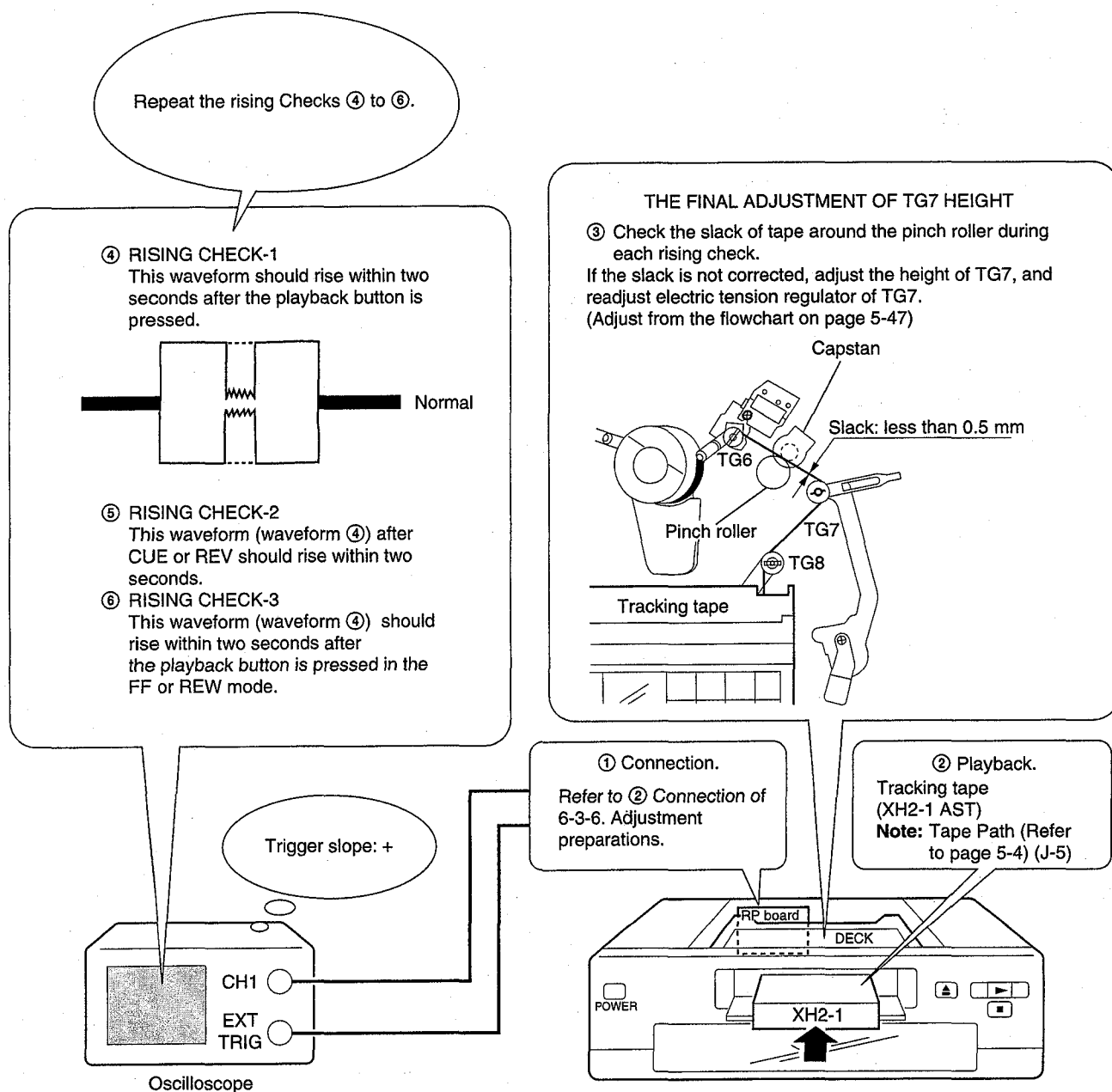
Tracking tape (XH2-1 AST)  
**Note:** Tape Path (Refer to page 5-4) (J-5)



### 6-3-9. CUE AND REV CHECK



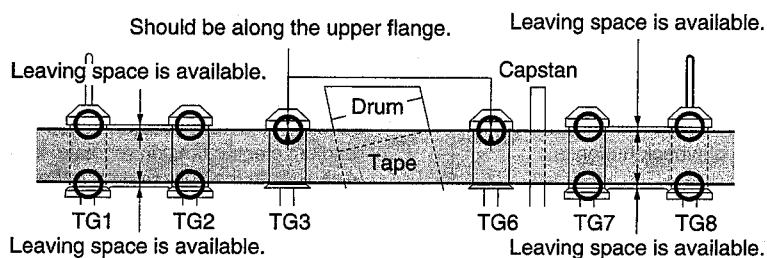
## 6-3-10. RISING CHECK



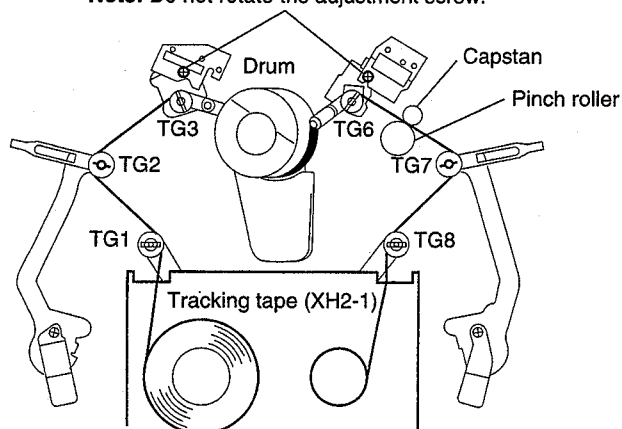
## 6-3-11. TAPE PATH CHECK

- ② It will be okayed, if there is no curls at the guides, capstan, etc. (○ part) in the **CUE** and **REV** mode.

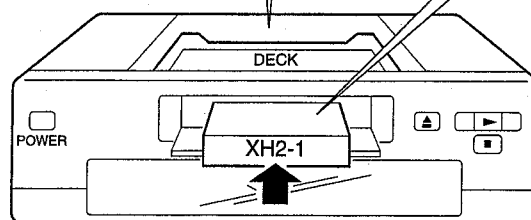
The following is ideal, but, it is satisfactory if the RF waveform is normal.



**Note:** Do not rotate the adjustment screw.



- ① Playback.  
Tracking tape (XH2-1 AST)  
**Note:** Tape Path (Refer to page 5-4) (J-5)



- ③ After adjustment and check, return the data set by the adjusting remote commander to the original value.



## 5-2. SERVICE MODE

### 5-2-1. ADJUSTING REMOTE COMMANDER

The adjusting remote commander is used for changing the calculation coefficient in signal processing, EVR data, etc. The adjusting remote commander performs bi-directional communication with the unit using the remote commander signal line (LANC). The resultant data of this bi-directional communication is written in the non-volatile memory.

#### 1. Used Adjustment Remote Commander

- 1) With the unit set in STANDBY mode, connect the adjusting remote commander to the remote (LANC) terminal.
- 2) Adjust the HOLD switch of the adjusting remote commander to "HOLD" (SERVICE position).
- 3) Turn on the power with the ON/STANDBY switch of the unit. If it has been properly connected, the LCD on the adjusting remote commander will display as shown in Fig. 5-2-1.

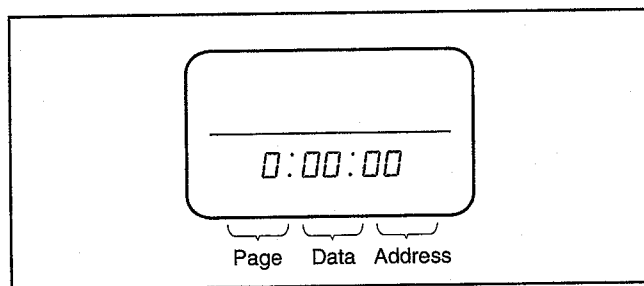


Fig. 5-2-1.

- 4) Operate the adjusting remote commander as follows.

#### • Changing the page

The page increases when the EDIT SEARCH + button is pressed, and decreases when the EDIT SEARCH - button is pressed. There are altogether 16 pages, from 0 to F.

Hexadecimal notation	0 1 2 3 4 5 6 7 8 9 A B C D E F
LCD Display	0 1 2 3 4 5 6 7 8 9 A b c d E F
Decimal notation conversion value	0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15

Table 5-2-1.

#### • Changing the address

The address increases when the FF (▶▶) button is pressed, and decreases when the REW (◀◀) button is pressed. There are altogether 256 addresses, from 00 to FF.

#### • Changing the data (Data setting)

The data increases when the PLAY (▶) button is pressed, and decreases when the STOP (■) button is pressed. There are altogether 256 data, from 00 to FF.

#### • Writing the adjustment data

The PAUSE button must be pressed to write the adjustment data (C page, D page and E page) in the nonvolatile memory. (The new adjustment data will not be recorded in the non-volatile memory if this step is not performed.)

#### 2. Precautions Upon Using The Adjusting Remote Commander

Mishandling of the adjusting remote commander may erase the correct adjustment data at times. To prevent this, it is recommended that all adjustment data be noted down before beginning adjustments and new adjustment data after each adjustment.

## 5-2-2. DATA PROCESSING

The calculation of the adjusting remote commander display data (hexadecimal notation) are required for obtaining the adjustment data of some adjustment items. In this case, after converting the hexadecimal notation to decimal notation, calculate and convert the result to hexadecimal notation, and use it as the adjustment data. Table 5-2-2. indicates the hexadecimal notation- the decimal notation, calculation table.

Hexadecimal notation-Decimal notation

The lower digits of the hexadecimal notation The upper digits of the hexadecimal notation	0	1	2	3	4	5	6	7	8	9	A	B	C	D	E	F
											(H)	(b)	(c)	(d)	(E)	(F)
0	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
2	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47
3	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63
4	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79
5	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95
6	96	97	98	99	100	101	102	103	104	105	106	107	108	109	110	111
7	112	113	114	115	116	117	118	119	120	121	122	123	124	125	126	127
8	128	129	130	131	132	133	134	135	136	137	138	139	140	141	142	143
9	144	145	146	147	148	149	150	151	152	153	154	155	156	157	158	159
A (H)	160	161	162	163	164	165	166	167	168	169	170	171	172	173	174	175
B (b)	176	177	178	179	180	181	182	183	184	185	186	187	188	189	190	191
C (c)	192	193	194	195	196	197	198	199	200	201	202	203	204	205	206	207
D (d)	208	209	210	211	212	213	214	215	216	217	218	219	220	221	222	223
E (E)	224	225	226	227	228	229	230	231	232	233	234	235	236	237	238	239
F (F)	240	241	242	243	244	245	246	247	248	249	250	251	252	253	254	255

Note : ( ) indicate the adjusting remote control unit display.

(Example) In the case that the adjusting remote control unit display are BD (bd).

As the upper digit of the hexadecimal notation is B (b), and the lower digit is D (d), the intersection "189" of the ① and ② in the above table is the decimal notation to be calculated.

Table 5-2-2.

### 5-2-3. SERVICE MODE

#### 1. Emergence Memory Address

Page C		Addresses 30 to 3B
Address	Contents	
30	EMG code when first error occurs	
32	Upper: MSW code when shift starts when first error occurs Lower: MSW code when first error occurs	
33	Lower: MSW code to be moved when first error occurs	
34	EMG code when second error occurs	
36	Upper: MSW code when shift starts when second error occurs Lower: MSW code when second error occurs	
37	Lower: MSW code to be moved when second error occurs	
38	EMG code when last error occurs	
3A	Upper: MSW code when shift starts when last error occurs Lower: MSW code when last error occurs	
3B	Lower: MSW code to be moved when last error occurs	

When no error occurs in the unit, data 00 is written in the above addresses (30 to 3B). When the first error occurs in the unit, the data corresponding to the error is written in the first emergency address (30 to 33). In the same way, when the second error occurs, the data corresponding to the error is written in the second emergency address (34 to 37).

Finally, when the last error occurs, the data corresponding to the error is written in the last emergency address (38 to 3B). Consequently, addresses 30 to 3B are updated each time errors occur.

**Note 1:** After completing adjustments, be sure to rewrite the data of addresses 30 to 3B to 00.

- 1) Select page: 0, address: 01, and set data: 01.
- 2) Select page: C, address: 30, set data: 00, and press the PAUSE button of the adjusting remote commander.
- 3) Select page: C, address: 31, set data: 00, and press the PAUSE button of the adjusting remote commander.
- 4) Select page: C, address: 32, set data: 00, and press the PAUSE button of the adjusting remote commander.
- 5) Select page: C, address: 33, set data: 00, and press the PAUSE button of the adjusting remote commander.
- 6) Select page: C, address: 34, set data: 00, and press the PAUSE button of the adjusting remote commander.
- 7) Select page: C, address: 35, set data: 00, and press the PAUSE button of the adjusting remote commander.
- 8) Select page: C, address: 36, set data: 00, and press the PAUSE button of the adjusting remote commander.
- 9) Select page: C, address: 37, set data: 00, and press the PAUSE button of the adjusting remote commander.
- 10) Select page: C, address: 38, set data: 00, and press the PAUSE button of the adjusting remote commander.
- 11) Select page: C, address: 39, set data: 00, and press the PAUSE button of the adjusting remote commander.
- 12) Select page: C, address: 3A, set data: 00, and press the PAUSE button of the adjusting remote commander.
- 13) Select page: C, address: 3B, set data: 00, and press the PAUSE button of the adjusting remote commander.
- 14) Select page: 0, address: 01, set data: 00, and press the PAUSE button of the adjusting remote commander.

#### 1-1. EMG Code (Emergency Code)

Codes corresponding to the errors which occur are written in addresses 30, 34, 38. The type of error indicated by the code are shown in the following table.

Code	Error Type
00	No error (Initial state)
10	Loading motor time-out during LOAD
11	Loading motor time-out during UNLOAD
20	Reel motor error
22	T reel error
23	S reel error
24	Swing error
32	Error during normal capstan rotation
33	Cassette compartment LOAD error
35	Cassette compartment UNLOAD error
40	FG error during drum start-up
42	FG error during normal drum rotation
50	DEW detection
52	Wet DEW detection
60	Electrical tension regulator error

## 5-3. VIDEO SECTION ADJUSTMENTS

When performing adjustments, refer to the layout diagrams for adjustment related parts on page 5-92.

### 3-1. PREPARATIONS BEFORE ADJUSTMENT

#### 3-1-1. Equipment Used

- 1) TV monitor
- 2) Oscilloscope with 2-phenomenon, 30 MHz band, and delay mode (Unless specified otherwise, use a 10 : 1 probe)
- 3) Frequency counter
- 4) Digital voltmeter
- 5) Audio generator
- 6) Audio level meter
- 7) Audio distortion meter
- 8) Audio attenuator
- 9) Pattern generator (with VIDEO OUTPUT terminal and external sync function)
- 10) Digital camera recorder  
NTSC : DCR-VX1000  
PAL : DCR-VX1000E
- 11) Vectorscope
- 12) Alignment tape
  - SW/OL reference (XH2-3)  
Parts code: 8-967-997-11
  - Audio operation check for NTSC (XH5-3)  
Parts code: 8-967-997-51
  - System operation check for NTSC (XH5-5)  
Parts code: 8-967-997-61
  - Audio operation check for PAL (XH5-3P)  
Parts code: 8-967-997-55
  - System operation check for PAL (XH5-5P)  
Parts code: 8-967-997-66
  - BIST check for NTSC (XH5-6)  
Parts code: 8-967-997-71
  - BIST check for PAL (XH5-6P)  
Parts code: 8-967-997-76
- 13) Adjusting remote control unit (J-6082-053-B)
- 14) Multi CPC-8 jig (J-6082-388-A). (CN775 of the RP-228 board)
- 15) Extension board
  - For extension between CN101 of the RP-228 board and CN412 of the JC-19 board.
  - For extension between CN102 of the RP-228 board and CN411 of the JC-19 board. (30P, 0.5 mm) (J-6082-270-A)
  - For extension between CN771 of the RP-228 board and drum (M901) (10P, 1 mm) (J-6082-064-A)
  - For extension between CN002 of the CM-56 board and CN501 of the VA-102 board (8P, 1 mm) (J-6082-058-A)
  - For extension between CN006 of the CM-56 board and the reel motor (M904) (15P, 1.25 mm) (J-6902-354-A)
  - For extension between CN001 of the CM-56 board and CN101 of the MD-63 board (16P, 1 mm) (J-6082-020-A)

NTAC : DSR-40

PAL : DSR-40P

#### 3-1-2. Connection of Equipment

According to the specification for the input terminal (S VIDEO input, VIDEO input, or DV input), connect measuring equipment as shown in Fig. 5-3-1, and make adjustment.

The input terminal is specified in ( ) of the signal column.

Any input terminal can be used unless otherwise specified.

To switch between S VIDEO INPUT and VIDEO INPUT, use the VIDEO SELECT button on the front panel.

**Note 1:** In adjustments specifying for the S VIDEO input to be used, using the VIDEO input would disable the product specifications of this unit from being satisfied. Always use the input signal specified.

**Note 2:** If adjustments are used with the VTR with the S video output terminal as the signal source, the performance of this unit may be affected by the VTR. Use a pattern generator with a Y/C separator terminal as much as possible.

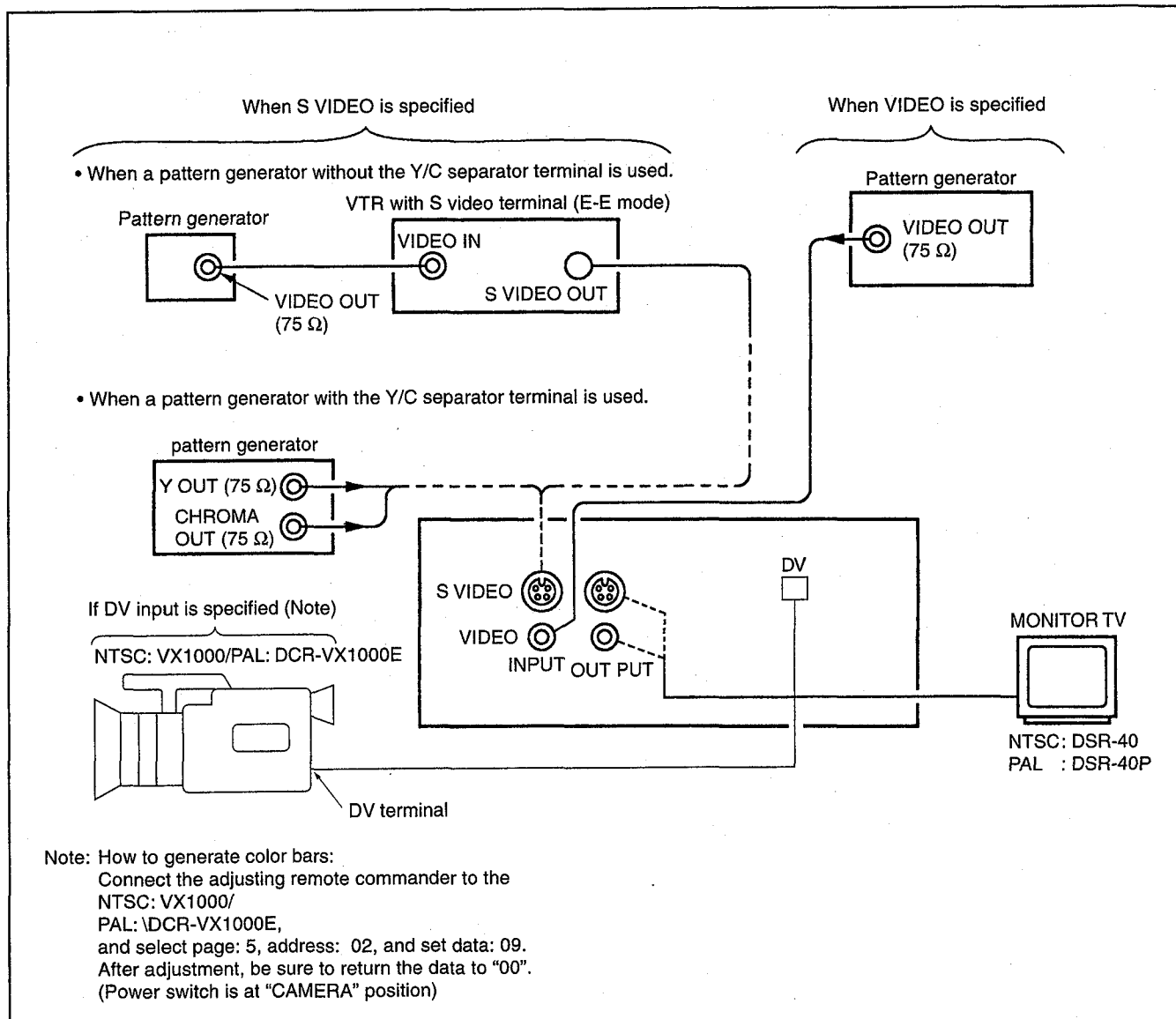


Fig. 5-3-1.

### 3-1-3. Adjusting Connectors (RP-228 Board CN775)

Some of the adjusting points of the video section are concentrated at CN775 of the RP-228 board. Connect the instruments via the multi CPC-8 jig (J-6082-388-A)

Pin No.	Signal Name	Pin No.	Signal Name
1	TCK	2	TMS
3	TDI	4	GND
5	TRACK ID	6	JSWP
7	GND	8	RF MONITOR
9	VCC2	10	AGC IN
11	VCC1	12	EQ IN
13	LOCK	14	REF OUT
15	ENV OUT	16	GND
17	TDO	18	C1ERP
19	FLTD	20	GND

Table 5-3-1.

### 3-1-4. Checking the Input Signals

Because the video signal obtained from the pattern generator is used as the adjustment signal for adjustments, the video output signal must satisfy the given specifications.

#### 1. S VIDEO Input

Connect the oscilloscope to the Y signal terminal of the S VIDEO input terminal, and check that the sync signal of the Y signal is approximately  $<0.286> [0.30]$  V and that the amplitude of the video section is approximately  $<0.714> [0.70]$  V. (When a VTR with the S VIDEO output terminal is used, also check that the chroma signal and burst signal have not remained)

Connect the oscilloscope to the chroma signal terminal of the S VIDEO input terminal, and check that the burst signal amplitude of the chroma signal is approximately  $<0.286> [0.30]$  V and flat, and that the red signal amplitude of the chroma signal is approximately  $<0.66> [0.67]$  V. The Y and chroma signals used in the adjustment are shown in Fig. 5-3-2.

$< >$ : NTSC model

$[ ]$ : PAL model

#### 2. VIDEO Input

Connect the oscilloscope to the VIDEO input terminal, and check that the sync signal amplitude of the video signal is approximately  $<0.286> [0.30]$  V, the amplitude of the video section is approximately  $<0.714> [0.70]$  V, the amplitude of the burst signal is approximately  $<0.286> [0.30]$  V and flat, and that the red signal amplitude of the chroma signal is approximately  $<0.66> [0.67]$  V. The video signal (color bar) used for adjustments is shown in Fig. 5-3-3.

$< >$ : NTSC model

$[ ]$ : PAL model

NTAC : DSR-40

PAL : DSR-40P

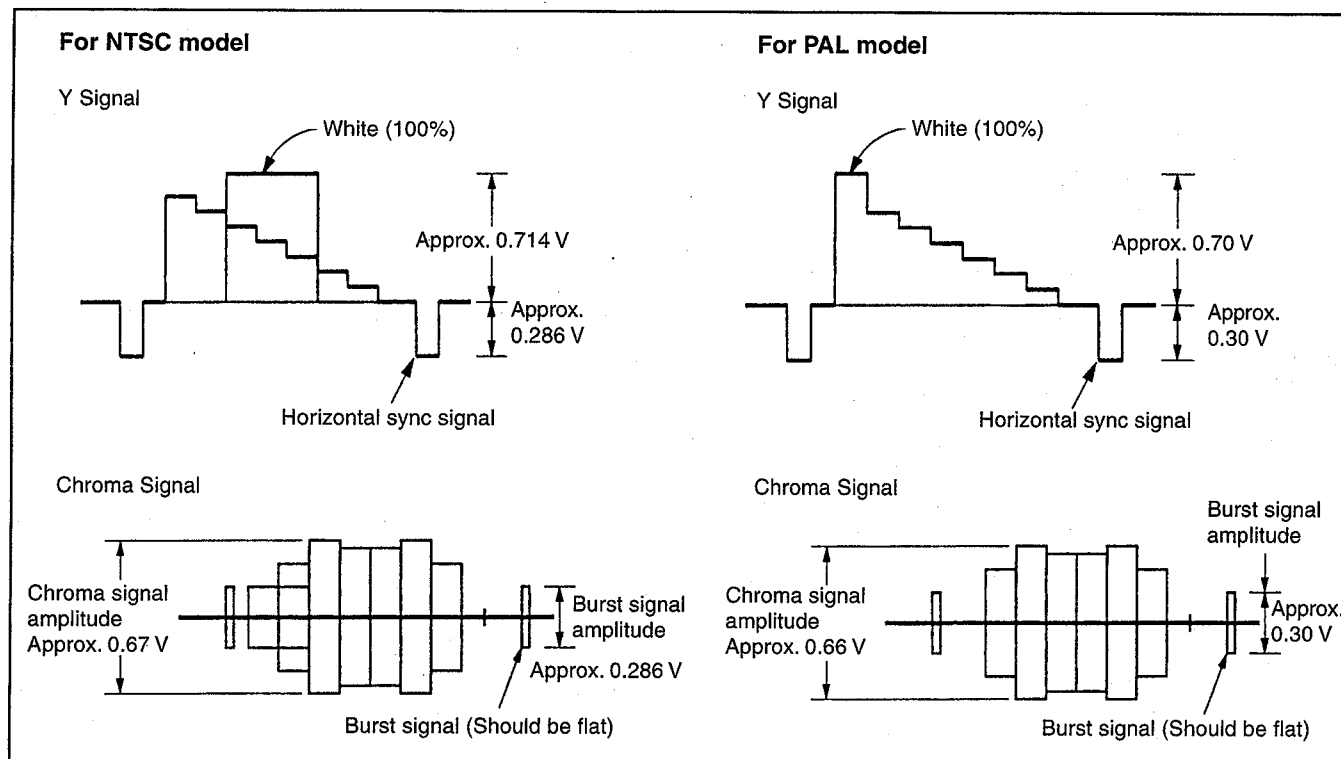


Fig. 5-3-2. Color Bar Signal of Pattern Generator

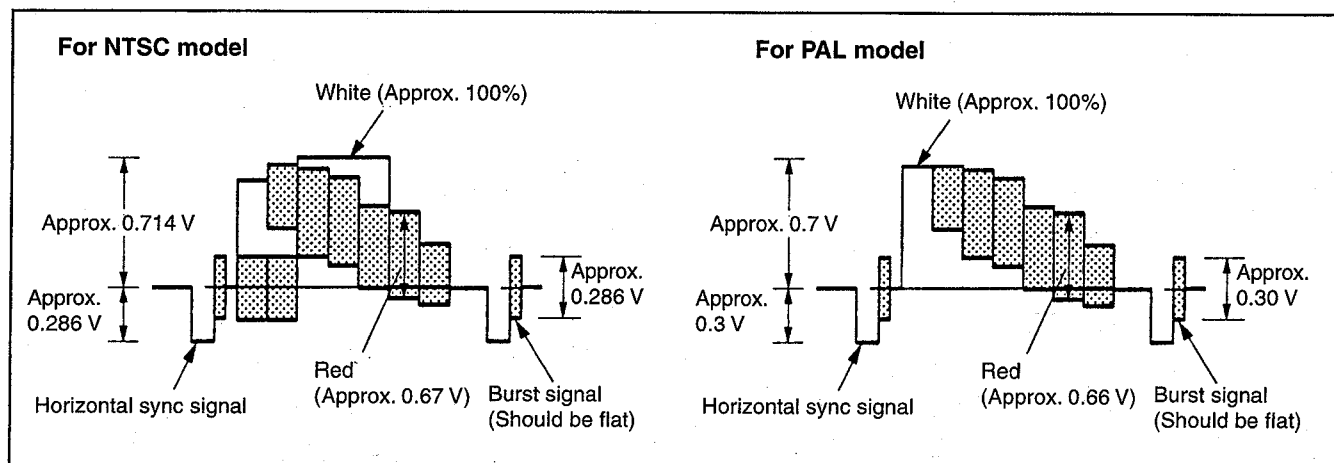


Fig. 5-3-3. Color Bar Signal of Pattern Generator

### 3-1-5. Adjustment Tapes

Use the alignment tapes shown in the following table.

Use tapes specified in the signal column of each adjustment.

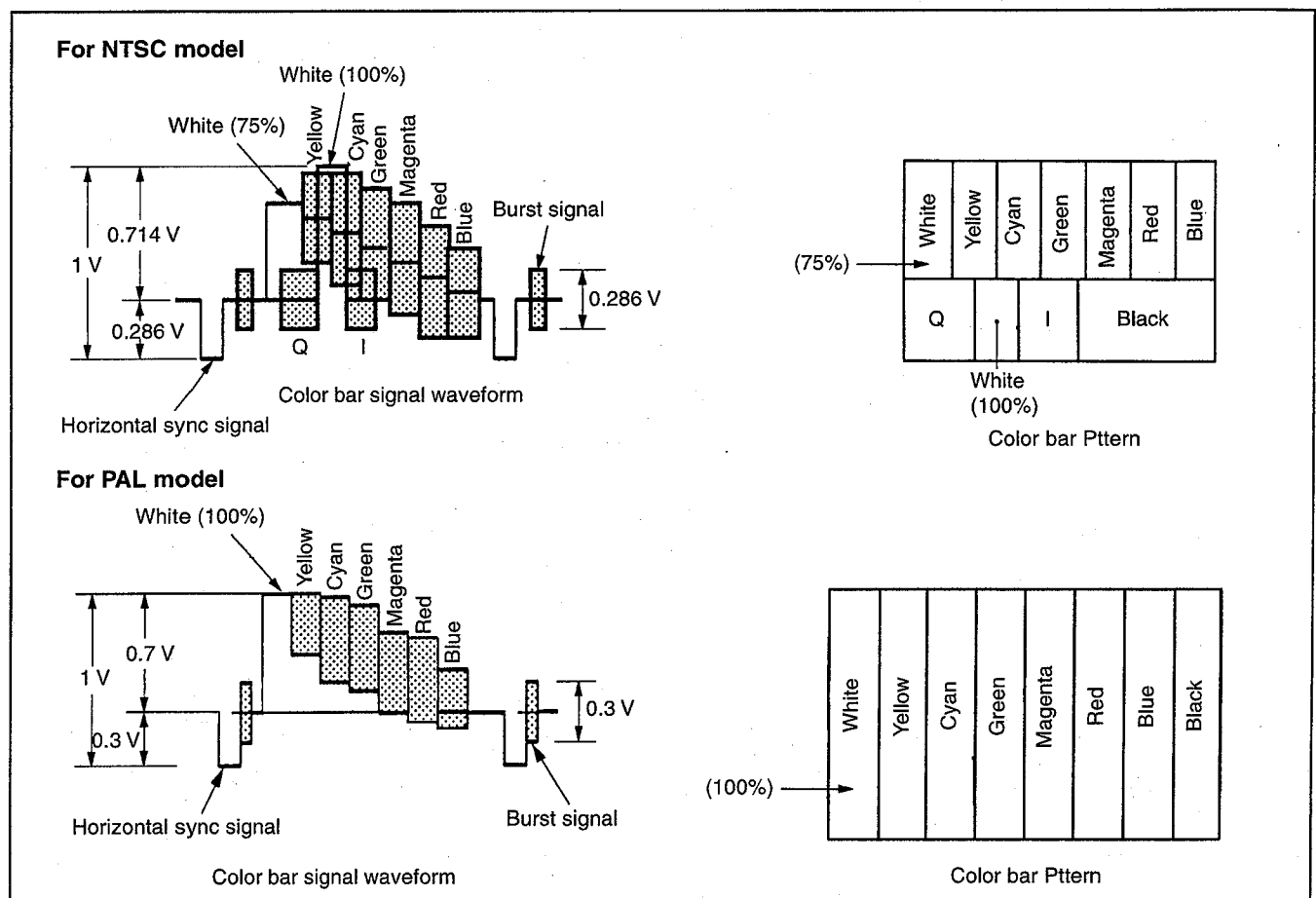
Name	Use
SW/OL standard (XH2-3)	Switching position adjustment
Audio operation check (XH5-3 (NTSC), XH5-3P (PAL))	Audio system adjustment
System operation check (XH5-5 (NTSC), XH5-5P (PAL))	Operation check
BIST check (XH5-6 (NTSC), XH5-6P (PAL))	BIST check

**Table 5-3-2.**

Fig. 5-3-4. shows the 75% color bar signals recorded on the alignment tape for Audio Operation Check (NTSC).

**Note :** Measure with video terminal (Terminated at 75  $\Omega$ )

NTAC : DSR-40  
PAL : DSR-40P



**Fig. 5-3-4. Color Bar Signal of Alignment Tapes**



### 3-1-6. Input/ Output Level and Impedance

INPUT	S VIDEO: Mini DIN 4-pin
	Luminance signal: 1 Vp-p (75 ohms unbalanced)
	Chrominance signal: 0.286 Vp-p (DSR-40) 0.3 Vp-p (DSR-40P) (75 ohms unbalanced)
MONITOR	VIDEO: BNC type
	Input signal: 1 Vp-p (75 ohms unbalanced)
	AUDIO: Phono jack (L, R)
OUTPUT	Input level: 2 Vrms (full bit)
	Input impedance: more than 47 kohms
	VIDEO: BNC type
MONITOR	Output signal: 1 Vp-p (75 ohms unbalanced)
	AUDIO CH1/3: Phono jack
	Output level: 2 Vrms (full bit)
OUTPUT	Output impedance: less than 10 kohms
	AUDIO CH2/4: Phono jack
	Output level: 2 Vrms (full bit)
MONITOR	Output impedance: less than 10 kohms
	S VIDEO: Mini DIN 4-pin
	Luminance signal: 1 Vp-p (75 ohms unbalanced)
OUTPUT	Chrominance signal: 0.286 Vp-p (DSR-40) 0.3 Vp-p (DSR-40P) (75 ohms unbalanced)
	VIDEO: BNC type
	1 Vp-p (75 ohms unbalanced)
MONITOR	Y: BNC type
	1 Vp-p (75 ohms unbalanced)
	R-Y: BNC type
OUTPUT	0.7 Vp-p (75 ohms unbalanced)
	(DSR-40: 75%, color bar/DSR-40P: 100%, color bar)
	B-Y: BNC type
MONITOR	0.7 Vp-p (75 ohms unbalanced)
	(DSR-40: 75%, color bar/DSR-40P: 100% color bar)
	AUDIO CH1/3: XLR 3-pin, male, +4 dBu, 600 ohms loading, balanced.
OUTPUT	AUDIO CH2/4: XLR 3-pin, male, +4 dBu, 600 ohms loading, balanced.
	REF VIDEO INPUT
	BNC type
MONITOR	1 Vp-p (75 ohms unbalanced)

### 3-2. POWER SUPPLY SYSTEM ADJUSTMENT

#### 1. Power Supply Voltage Check, Power Block (U-2 Board)

Mode	Playback
Measuring Instrument	Digital voltmeter
UNSW6V Check	
Measuring Point	pin ① of CN11
Specified Value	$6.0 \pm 0.5$ Vdc
UNSW3.1V Check	
Measuring Point	pin ② of CN11
Specified Value	$3.1 \pm 0.2$ Vdc
VIDEO5V, AUDIO5V Check	
Measuring Point	pin ③, ⑦ of CN11
Specified Value	$5.0 \pm 0.12$ Vdc
SW3.1V Check	
Measuring Point	pin ④ of CN11
Specified Value	$3.1 \pm 0.1$ Vdc
VIDEO-5V, AUDIO-5V Check	
Measuring Point	pin ⑥, ⑨ of CN11
Specified Value	$-5.0 \pm 0.12$ Vdc
SW5V Check	
Measuring Point	pin ③ of CN10
Specified Value	$5.0 \pm 0.12$ Vdc
DRUM6V Check	
Measuring Point	pin ④ of CN10
Specified Value	$6.0 \pm 0.5$ Vdc
MOTOR14V Check	
Measuring Point	pin ⑥ of CN10
Specified Value	$14.0 \pm 2$ Vdc

#### 2. Video/Audio Block Power Supply Voltage Check, Power Block (U-2 Board)

Mode	Playback
Measuring Instrument	Digital voltmeter
UNSW6V Check	
Measuring Point	pin ②, ③ of CN12
Specified Value	$6.0 \pm 0.5$ Vdc
UNSW3.1V Check	
Measuring Point	pin ④ of CN12
Specified Value	$3.1 \pm 0.2$ Vdc
UNSW-9V Check	
Measuring Point	pin ⑦ of CN12
Specified Value	$-9 \pm 0.5$ Vdc
UNSW14V Check	
Measuring Point	pin ⑧ of CN12
Specified Value	$14 \pm 2.0$ Vdc
SW12V Check	
Measuring Point	pin ⑨ of CN12
Specified Value	$12.0 \pm 1$ Vdc
SW12V Check	
Measuring Point	pin ⑪ of CN12
Specified Value	$-12.0 \pm 1$ Vdc

### 3-3. SYSTEM CONTROL SYSTEM ADJUSTMENT

#### 1. Initializing the C, D, E Page Data

**Note 1:** If "Initializing the C, D, E Page Data" is performed, all data of the C page, D page and E page will be initialized.

**Note 2:** If the C, D, E page data has been initialized, "Modification of C, D, E page Data" and all adjustments need to be performed again.

Mode	E-E
Signal	Arbitrary
Adjustment Page	C
Adjustment Address	00 to 6F
Adjustment Page	D
Adjustment Address	00 to 4F
Adjustment Page	E
Adjustment Address	00 to 3B

#### 2. Input of C page Initial Data

##### Input method:

- 1) Select page: 0, address: 01, and set data: 01.
- 2) Select page: 4, address: 02, set data: 01, and press the PAUSE button of the adjusting remote commander.
- 3) Select page: 4, address: 02, and confirm that the data change in the order of "01" → "03" → "05" → "00".
- 4) Modify the C page data. (Refer to C page address)

#### 3. Input of D page Initial Data

##### Input method:

- 1) Select page: 0, address: 01, and set data: 01.
- 2) Select page: 2, address: 00, set data: 2D, and press the PAUSE button of the adjusting remote commander.
- 3) Select page: 2, address: 01, set data: 2D, and press the PAUSE button of the adjusting remote commander.
- 4) Select page: 2, address: 02, and confirm that the data is "01".
- 5) Modify the D page data. (Refer to D page address)

#### 4. Input of E page Initial Data

##### Input method:

- 1) Select page: 0, address: 01, and set data: 01.
- 2) Select page: 5, address: 00, set data: 2D, and press the PAUSE button of the adjusting remote commander.
- 3) Select page: 5, address: 01, set data: 2D, and press the PAUSE button of the adjusting remote commander.
- 4) Select page: 5, address: 02, and confirm that the data is "01".
- 5) Modify the E page data. (Refer to E page address)

#### 5. Modification of C, D, E, Page Data

If the C, D, E page data has been initialized, change the data of the "Fixed data-2" address shown in the following tables by manual input.

##### Modifying Method:

- 1) Before changing the data, select page: 0, address: 01, and set data: 01.
- 2) New data for changing are not shown in the tables because they are different in destination. When changing the data, copy the data built in the same model.

**Note :** If copy the data built in the different model, this set may not operate.

- 3) When changing the data, press the PAUSE button of the adjusting remote commander each time when setting new data to write the data in the non-volatile memory.
- 4) Check that the data of adjustment addresses is the initial value. If not, change the data to the initial value.
- 5) After completing "Modification of C, D, E Page Data", select page: 0, address: 01, and set data: 00. Also perform all adjustments.

## 6. Page C Address List

**Note 1:** Fixed data 1: Initialized data. (Refer to 2. Input of C Page Initial Data)

Fixed data 2: Modified data. (Refer to 5. Modification of C, D, E, Page Data)

Address	Initial Value	Remark
00		Fixed data-1
01		Fixed data-2
02 to 0C		Fixed data-1
0D		Fixed data-2
0E to 2F		Fixed data-1
30 to 3B	00	Emergency Memory Address
3C, 3D	F8	PLL fo Adjustment
3E, 3F	70	Recording Current Adjustment
40, 41	C0	AEQ Adjustment
42, 43	90	
44	86	AGC Center Level Adjustment
45		Fixed data-1
46	86	PLL Capture Range Adjustment
47	C8	CLK Delay Adjustment
48 to 4B		Fixed data-1
4C to 4F	00	Switching Position Adjustment
50	54	Capstan FG Duty Adjustment
51	31	
52 to 59		Fixed data-1
5A	00	AEQ Adjustment
5B to 6F		Fixed data-1

## 7. Page D Address List

**Note 1:** Fixed data 1: Initialized data. (Refer to 3. Input of D Page Initial Data)

Fixed data 2: Modified data. (Refer to 5. Modification of C, D, E, Page Data)

Address	Initial Value	Remark
00 to 12		Fixed data-1
13		Fixed data-2
14		Fixed data-1
15 to 18		Fixed data-2
19 to 1E		Fixed data-1
1F		Fixed data-2
20 to 2B		Fixed data-1
2C to 2F		Fixed data-2
30 to 32		Fixed data-1
33	59	IC422 27MHz XTAL fo Adjustment
34	19	Playback CR Signal Level Adjustment
35	37	Playback CB Signal Level Adjustment
36	18	Playback Y Signal Level Adjustment
37 to 40		Fixed data-1
41 to 43		Fixed data-2
44 to 46		Fixed data-1
47		Fixed data-2
48 to 4F		Fixed data-1

## 8. Page E Address List

**Note 1:** Fixed data 1: Initialized data. (Refer to 4. Input of E Page Initial Data)

Fixed data 2: Modified data. (Refer to 5. Modification of C, D, E, Page Data)

Address	Initial Value	Remark
00 to 27		Fixed data-1
28 to 2C		Fixed data-2
2D		Fixed data-1
2E		Fixed data-2
2F to 35		Fixed data-1
36, 37		Fixed data-2
38		Fixed data-1
39		Fixed data-2
3A		Fixed data-1
3B		Fixed data-2
3C to 3F		Fixed data-1
40	76	Playback Composite VIDEO Chroma Adjustment
41		Fixed data-1
42	83	Playback Composite VIDEO Chroma Adjustment
43		Fixed data-1
44	88	Playback Y Signal Level Adjustment
45		Fixed data-1
46	80	Playback CB Signal Level Adjustment
47		Fixed data-1
48	80	Playback CR Signal Level Adjustment
49 to 4D		Fixed data-1
4E	16	EXT Subcarrier Phase Adjustment
4F to 51		Fixed data-1
52	80	Burst Position Adjustment (Coarse)
53	0	Burst Position Adjustment (Fine)
54	45	SYNC Position Adjustment (Coarse)
55		Fixed data-1
56	09	SYNC Position Adjustment (Fine)
57 to 5F		Fixed data-1
60	63	Y/C Separation (Y Signal Level ) Adjustment
61	69	Y/C Separation (Chroma Signal Level ) Adjustment
62	16	Playback Setup Level Adjustment
63	7A	Recording Chroma Decoder HUE Adjustment
64	7E	Recording Y Signal Level Adjustment
65	7A	Recording CB Signal Level Adjustment
66	7A	Recording CR Signal Level Adjustment
67		Fixed data-1
68	90	Recording Y/CB Delay Adjustmient
69	90	Recording Y/CR Delay Adjustment
6A		Fixed data-1
6B	5F	Playback Y/CR Delay Adjustment
6C	6B	Playback Y/CB Delay Adjustment
6D	48	Playback SYNC Level Adjustment
6E		Fixed data-1
6F	8B	Playback Burst Level Adjustment

Address	Initial Value	Remark
70	8B	Playback Burst Level Adjustment (PAL)
71	B1	Playback Carrier Balance Adjustment
72	8A	Playback Carrier Balance Adjustment
73	60	INT Subcarrier Frequency Adjustment
74	37	Playback Composite VIDEO Chroma Adjustment
75	50	OSD1 Subcarrier Frequency Adjustment
76	50	OSD2 Subcarrier Frequency Adjustment
77		Fixed data-1

### 3-4. SERVO SYSTEM ADJUSTMENTS

#### 1. Switching Position Adjustment (CM-56 Board)

Mode	Playback
signal	SW/OL reference tape
Measurement Point	Page: 3, address: 03 on displayed data of adjusting remote commander
Measuring Instrument	Adjusting remote commander
Adjustment Page	C
Adjustment Address	4C, 4D, 4E, 4F
Specified Value	"00"

##### Adjusting method:

- 1) Select page: 0, address: 01, and set data: 01.
- 2) Select page: 3, address: 01, set data: 0E, and press the PAUSE button of the adjusting remote commander.
- 3) Select page: 3, address: 02, and confirm that the data changes from "0E" to "00".
- 4) Select page: 3, address: 03, and confirm that the data is "00".
- 5) Turn OFF the HOLD switch on the adjusting remote commander and wait for more than 2 seconds. (The adjusted data are automatically written to page: C, address: 4C to 4F)
- 6) Turn ON the HOLD switch on the adjusting remote commander.
- 7) Select page: 0, address: 01, and set data: 00.
- 8) Stop the tape playback.
- 9) Turn the POWER switch OFF.

#### 2. Capstan FG Duty Adjustment (CM-56 Board)

Mode	Playback
signal	Arbitrary tape
Measurement Point	Page: 3, address: 03 on displayed data of adjusting remote commander
Measuring Instrument	Adjusting remote commander
Adjustment Page	C
Adjustment Address	50, 51
Specified Value	"00"

##### Adjusting method:

- 1) Select page: 0, address: 01, and set data: 01.
- 2) Select page: 3, address: 01, set data: 15, and press the PAUSE button of the adjusting remote commander.
- 3) Select page: 3, address: 02, and confirm that the data changes from "15" to "00".
- 4) Select page: 3, address: 03, and confirm that the data is the following value  
When "00": Normal  
When "01": Faulty  
Perform the following adjustment only when "00" is displayed.
- 5) Select page: 3, address: 04 and 05, read the data, and take the values as D<sub>04</sub> and D<sub>05</sub> respectively.  
(The data on page: 3, address: 05 must be 2F to 3F)
- 6) Select page: C, address: 50, set data: D<sub>04</sub>, and press the PAUSE button of the adjusting remote commander.
- 7) Select page: C, address: 51, set data: D<sub>05</sub>, and press the PAUSE button of the adjusting remote commander.
- 8) Select page: 3, address: 01, set data: 00, and press the PAUSE button of the adjusting remote commander.
- 9) Select page: 0, address: 01, and set data: 00.
- 10) Stop the tape playback.
- 11) Turn the POWER switch OFF.

### 3-5. VIDEO SYSTEM ADJUSTMENTS

#### 3-5-1. RP-228 Board Adjustments

##### 1. Recording Current Adjustment (RP-228 Board)

Mode	E-E
Measurement Point	ODDch adjustment CH1: Pin ⑥ of CN771 (CL812) CH2: Pin ⑤ of CN771 (CL813) EVENch adjustment CH1: Pin ② of CN771 (CL816) CH1: Pin ③ of CN771 (CL815)
Measuring Instrument	Oscilloscope ADD mode CH2 INV mode
Adjustment Page	C
Adjustment Address	3E, 3F
Specified Value	$A = 4.1 \pm 0.1$ Vp-p

Connection: Disconnect CN771 and connect as follows.

- 1) ODDch adjustment: Connect a 180  $\Omega$  resistor between Pin ⑥ of CN771 (CL812) and Pin ⑤ of CN771 (CL813).
- 2) EVENch adjustment: Connect a 180  $\Omega$  resistor between Pin ② of CN771 (CL816) and Pin ③ of CN771 (CL815).  
180  $\Omega$  resistor (Parts code: 1-249-408-11)

##### Adjusting method:

- 1) Equalize the vertical range of CH1 and CH2 of the oscilloscope.
- 2) Set the oscilloscope to the ADD mode, and set CH2 to the INV mode.
- 3) Select page: 0, address: 01, and set data: 01.
- 4) Select page: 3, address: 01, set data: 0C, and press the PAUSE button of the adjusting remote commander.
- 5) Select page: 3, address: 34, and set data: 01.
- 6) Select page: C, address: 3F (ODDch adjustment) or 3E (EVENch adjustment), change the data, and adjust the signal voltage (A) to the specified value, press the PAUSE button on the adjustment remote commander.
- 7) Select page: 3, address: 34, and set data: 04.
- 8) Select page: 3, address: 01, set data: 00, and press the PAUSE button of the adjusting remote commander.
- 9) Select page: 0, address: 01, and set data: 00.

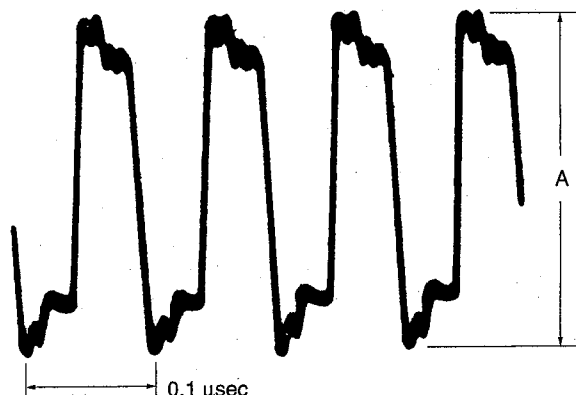


Fig. 5-3-5.

##### 2. PLL to Adjustment (RP-228 Board)

Mode	E-E
Measurement Point	Displayed data of page: 3, address: 04
Measuring Instrument	
Adjustment Page	C
Adjustment Address	3D, 3C
Specified Value	Displayed data is "FD" to "FF", "00" to "03" ("FF", "00" are center values)

##### Adjusting method:

- 1) Select page: 0, address: 01, and set data: 01.
- 2) Select page: 3, address: 01, set data: 05, and press the PAUSE button of the adjusting remote commander.
- 3) Select page: 3, address: 36, and set data: 40.
- 4) Select page: 3, address: 04, and check that the average value D04 of the displayed data is "FD" to "FF" or "00" to "03". If outside this range, select page: C, address: 3C, change the data, and check again.  
[If D04 is "80" to "FC"]  
Select page: C, address: 3C, and decrease the data. (As the data is to be rewritten, press the PAUSE button of the adjusting remote commander)  
[If D04 is "04" to "7F"]  
Select page: C, address: 3C, and increase the data. (As the data is to be rewritten, press the PAUSE button of the adjusting remote commander)
- 5) Select page: 3, address: 36, and set data: 05.
- 6) Select page: 3, address: 04, and check that the average value D04 of displayed data is "FD" to "FF" or "00" to "03". If outside this range, select page: C, address: 3D, change the data, and check again.  
[If D04 is "80" to "FC"]  
Select page: C, address: 3D, and decrease the data. (As the data is to be rewritten, press the PAUSE button of the adjusting remote commander)  
[If D04 is "04" to "7F"]  
Select page: C, address: 3D, and increase the data. (As the data is to be rewritten, press the PAUSE button of the adjusting remote commander)
- 7) Select page: 3, address: 01, set data: 00, and press the PAUSE button of the adjusting remote commander.
- 8) Select page: 3, address: 36, and set data: 02.

### 3. CLK DELAY Adjustment (RP-228 Board)

Mode	Recording/playback
Signal	Color bar
Measurement Point	CH1: Pin ⑩ of CN775 (C1ERP) CH2: Pin ⑥ of CN775 (JSWP)
Measuring Instrument	Oscilloscope Trigger source: CH2
Adjustment Page	C
Adjustment Address	47

#### Adjusting method:

- 1) Record color bar signal for two minutes on any tape.
- 2) Select page: 0, address: 01, and set data: 01.
- 3) Write the following data in page: C, address: 40 to 43, 47, 4B, 5A.  
 (To write the data, press the PAUSE button of the adjusting remote commander each time data is set.)  
 Page: C, address: 40, data: C0  
 Page: C, address: 41, data: C0  
 Page: C, address: 42, data: 90  
 Page: C, address: 43, data: 90  
 Page: C, address: 47, data: C8  
 Page: C, address: 4B, data: 80  
 Page: C, address: 5A, data: 00
- 4) Playback the part recorded with the color bar.
- 5) Select page: C, address: 47, increase the data, and read the data D<sub>1</sub> when the CH1 pulse is set to the whole audio and video areas.
- 6) Select page: C, address: 47, decrease the data, and read the data D<sub>2</sub> when the CH1 pulse is set to the whole audio and video areas.
- 7) Obtain the average value of D<sub>1</sub> and D<sub>2</sub>, and take it as D<sub>3</sub>.
- 8) Select page: C, address: 47, set data: D<sub>3</sub>, and press the PAUSE button of the adjusting remote commander.
- 9) Select page: C, address: 4B, set data: 0E, and press the PAUSE button of the adjusting remote commander.
- 10) Select page: C, address: 5A, set data: 8C, and press the PAUSE button of the adjusting remote commander.
- 11) Select page: 0, address: 01, and set data: 00.
- 12) After completing the adjusting, perform "5. AEQ Adjustment".

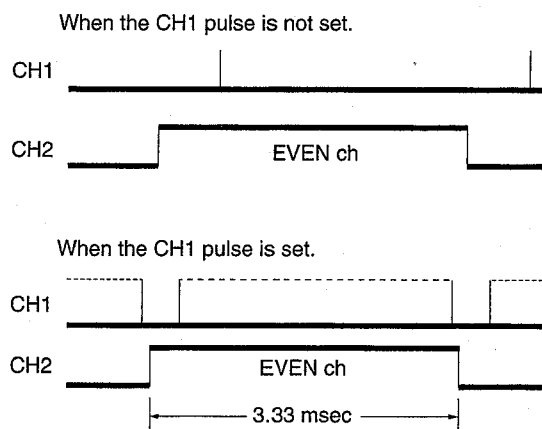


Fig. 5-3-6.

### 4. AGC Center Level Adjustment (RP-228 Board)

Mode	Recording/playback
Signal	Color bar
Measurement Point	CH1: Pin ⑩ of CN775 (C1ERP) CH2: Pin ⑥ of CN775 (JSWP)
Measuring Instrument	Oscilloscope Trigger source: CH2
Adjustment Page	C
Adjustment Address	44

#### Adjusting method:

- 1) Record color bar signal for two minutes on any tape.
- 2) Select page: 0, address: 01, and set data: 01.
- 3) Write the following data in page: C, addresses: 40 to 44, 4B, 5A.  
 (To write the data, press the PAUSE button of the adjusting remote commander each time data is set.)  
 Page: C, address: 40, data: C0  
 Page: C, address: 41, data: C0  
 Page: C, address: 42, data: 90  
 Page: C, address: 43, data: 90  
 Page: C, address: 44, data: 90  
 Page: C, address: 4B, data: 80  
 Page: C, address: 5A, data: 00
- 4) Playback the part recorded with the color bar signal.
- 5) Select page: C, address: 44, increase the data, and read the data D<sub>1</sub> when the CH1 pulse is set to the whole audio and video areas.
- 6) Select page: C, address: 44, decrease data, and read the data D<sub>2</sub> when the CH1 pulse is set to the whole audio and video areas.
- 7) Obtain the average value of D<sub>1</sub> and D<sub>2</sub>, and take it as D<sub>3</sub>.
- 8) Select page: C, address: 44, set data: D<sub>3</sub>, and press the PAUSE button of the adjusting remote commander.
- 9) Select page: C, address: 4B, set data: 00, and press the PAUSE button of the adjusting remote commander.
- 10) Select page: C, address: 5A, set data: 8C, and press the PAUSE button of the adjusting remote commander.
- 11) Select page: 0, address: 01, and set data: 00.
- 12) After completing the adjusting, perform "5. AEQ Adjustment".

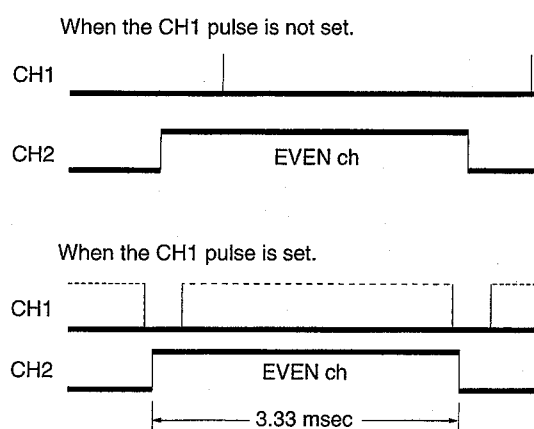


Fig. 5-3-7.



## 5. AEQ Adjustment (RP-228 Board)

Mode	Recording/playback
Signal	Arbitrary
Measurement Point	Pin ⑧ of CN775 (RF MONITOR) (Note 1)
Measuring Instrument	Oscilloscope
Adjustment Page	C
Adjustment Address	40, 41, 42, 43, 5A

**Note 1:** Connect a 75  $\Omega$  resistor between Pin ⑧ and ⑦ (GND) of CN 775.

75  $\Omega$  resistor (Parts code: 1-247-804-11)

**Note 2:** Use the DVM60ME tape or equivalents.

### Adjusting method:

- 1) Select page: 0, address: 01, and set data: 01.
- 2) Select page: C, address: 4B, set data: 80, and press the PAUSE button of the adjusting remote commander.
- 3) Write data in page: C, addresses: 40 to 43, and 5A as shown in the following table.

(To write the data, press the PAUSE button of the adjusting remote commander each time data is set.)

Address	Data
40	C0
41	C0
42	90
43	90
5A	00

- 4) Record color bar signal for one minute from the tape top.
- 5) Rewind the tape, and play back the part recorded.
- 6) When the RF output stabilizes, select page: 3, address: 01, and set data: 07, and press the PAUSE button of the adjusting remote commander.
- 7) About 20 to 30 seconds after pressing the PAUSE button, select page: 3, address: 02, and check that the data changes from "07" to "00".
- 8) Select page: 3, address: 03, and check that the data is the following value.
  - When "00" : Normal
  - When "01" : EVENch is faulty
  - When "02" : ODDch is faulty
  - When "03" : EVENch and ODDch are faulty
 Perform the following procedure only when "00" is displayed.
- 9) Select page: 3, address: 04 to 07, read the data, and take the values as D04, D05, D06, and D07.

- 10) Select page: C, address: 40, set data: D04, and press the PAUSE button of the adjusting remote commander.
- 11) Select page: C, address: 42, set data: D05, and press the PAUSE button of the adjusting remote commander.
- 12) Select page: C, address: 41, set data: D06, and press the PAUSE button of the adjusting remote commander.
- 13) Select page: C, address: 40, set data: D07, and press the PAUSE button of the adjusting remote commander.
- 14) Select page: C, address: 5A, set data: 8C, and press the PAUSE button of the adjusting remote commander.
- 15) Select page: C, address: 4B, set data: 00, and press the PAUSE button of the adjusting remote commander.
- 16) Select page: C, address: 01, and set data: 00.

## 6. PLL Capture Range Adjustment (RP-228 Board)

Mode	Recording/Playback
Signal	Color bar
Measurement Point	CH1: Pin ⑩ of CN775 (C1ERP) CH2: Pin ⑥ of CN775 (JSWP)
Measuring Instrument	Oscilloscope Trigger source: CH2
Adjustment Page	C
Adjustment Address	46

### Adjusting method:

- Record color bar signal for two minutes on any tape.
- Select page: 0, address: 01, and set data: 01.
- Write the following data in page: C, addresses: 4B and 5A.  
(To write the data, press the PAUSE button of the adjusting remote commander each time data is set.)  
Page: C, address: 4B, data: 80  
Page: C, address: 5A, data: 00
- Playback the part recorded with the color bar signal.
- Select page: C, address: 46, set data: 80, and press the PAUSE button of the adjusting remote commander.
- Select page: C, address: 46, set the data to "60", and check that the pulse is not set at the audio area head of the ERRP waveform's ODDch of the oscilloscope (CH1).
- Select page: C, address: 46, set the data to "A0", and check that the pulse is not set at the audio area head of the C1ERP waveform's ODDch of the oscilloscope (CH1).  
After confirming steps 6) and 7), select page: C, address: 46, set data: 80 again and proceed to step 12).
- If the pulse is set in steps 6) and 7), select page: C, address: 46, increase the data from "80", and read the data D<sub>1</sub> when the pulse is set at the audio area head of CH1.
- Select page: C, address: 46, decrease the data from "80", and read the data D<sub>2</sub> when the pulse is set at the audio area head of CH1.
- Obtain the average value of D<sub>1</sub> and D<sub>2</sub>, and take it as D<sub>3</sub>.
- Select page: C, address: 46, set data: D<sub>3</sub>, and press the PAUSE button of the adjusting remote commander.
- Select page: C, address: 4B, set data: 00, and press the PAUSE button of the adjusting remote commander.
- Select page: C, address: 5A, set data: 8C, and press the PAUSE button of the adjusting remote commander.
- Select page: 0, address: 01, and set data: 00.

## 7. IC774 41.85 MHzVCO Check (RP-228 Board)

Mode	E-E
Signal	Arbitrary
Measurement Point	Page: 3, address: 39 on displayed data of
Measuring Instrument	adjustment remote commander
Adjustment Value	"37" to "C9" (0.6 to 2.2 Vdc)

### Check method:

- Select page: 3, address: 39, and check that the displayed data is "37" to "C9".

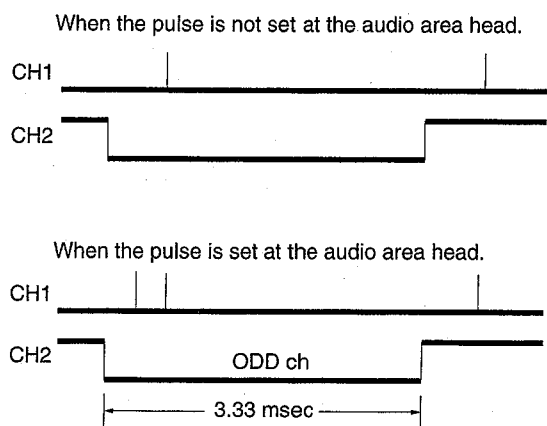


Fig. 5-3-8.

### 3-5-2. JC-19 Board Adjustments

#### 1. A/D Converter Reference Voltage Adjustment 1 (JC-19 Board)

Mode	E-E
Signal	Arbitrary
Measurement Point	Pin ⑤ of IC013 (CL061)
Measuring Instrument	Digital voltmeter
Adjusting Element	RV001
Specified Value	A = $2.83 \pm 0.01$ Vdc

##### Adjusting method:

- 1) Set the VRT voltage (A) to the specified value using RV001.

#### 2. A/D Converter Reference Voltage Adjustment 2 (JC-19 Board)

Mode	E-E
Signal	Arbitrary
Measurement Point	Pin ③ of IC013 (CL062)
Measuring Instrument	Digital voltmeter
Adjusting Element	RV002
Specified Value	A = $0.96 \pm 0.01$ Vdc

##### Adjusting method:

- 1) Set the VBT voltage (A) to the specified value using RV002.

#### 3. Y Signal Clamp Reference Voltage Adjustment (JC-19 Board)

Mode	E-E
Signal	Color bar
Measurement Point	Pin ⑧ of IC011 (CL054)
Measuring Instrument	Digital voltmeter
Adjusting Element	RV011
Specified Value	A = $1.150 \pm 0.005$ Vdc

Connection: Connect a jumper wire between Pin ⑧ of IC018 (CL150) and GND.

##### Adjusting method:

- 1) Set the Y signal clamp reference voltage (A) to the specified value using RV011.

#### 4. CR Signal Clamp Reference Voltage Adjustment (JC-19 Board)

Mode	E-E
Signal	Color bar
Measurement Point	Pin ⑧ of IC010 (CL052)
Measuring Instrument	Digital voltmeter
Adjusting Element	RV010
Specified Value	A = $1.900 \pm 0.005$ Vdc

Connection: Connect a jumper wire between Pin ⑧ of IC018 (CL150) and GND.

##### Adjusting method:

- 1) Set the CR signal clamp reference voltage (A) to the specified value using RV010.

#### 5. CB Signal Clamp Reference Voltage Adjustment (JC-19 Board)

Mode	E-E
Signal	Color bar
Measurement Point	Pin ⑧ of IC009 (CL053)
Measuring Instrument	Digital voltmeter
Adjusting Element	RV012
Specified Value	A = $1.900 \pm 0.005$ Vdc

Connection: Connect a jumper wire between Pin ⑧ of IC018 (CL150) and GND.

##### Adjusting method:

- 1) Set the CB signal clamp reference voltage (A) to the specified value using RV012.

## 6. Playback Y Signal Level Adjustment (JC-19 Board)

Mode	Recording
Signal	DV input (Note 1)
Measurement Point	Pin ⑧ of CN104 or pin ⑳ of CN102 on VA-106 board
Measuring Instrument	Oscilloscope
Adjustment Page	D
Adjustment Address	36
Specified Value	A = $0.43 \pm 0.04$ V (NTSC) A = $0.41 \pm 0.04$ V (PAL)

**Note 1:** Generate color bar signal with NTSC: DCR-VX1000/PAL: DCR-VX1000E and enter it to the DV terminal. (How to generate color bars: Connect the adjusting remote commander to the NTSC: DCR-VX1000/PAL: DCR-VX1000E, select page: 5, address: 02, and set data: 09. After adjustment, be sure to return the data to "00")

### Adjusting method:

- 1) Select page: 0, address: 01, and set data: 01.
- 2) Select page: D, address: 36, change data, and adjust the Y signal level (A) to the specified value.
- 3) Select page: 0, address: 01, and set data: 00.

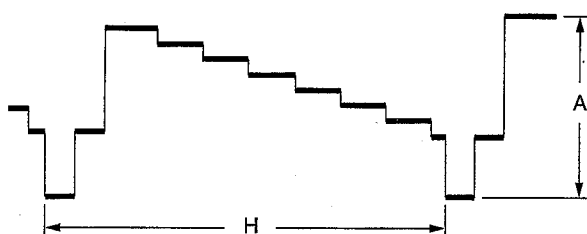


Fig. 5-3-9.

## 7. Playback CR Signal Level Adjustment (JC-19 Board)

Mode	Recording
Signal	DV input (Note 1)
Measurement Point	Pin ⑩ of CN104 or pin ㉑ of CN102 on VA-106 board
Measuring Instrument	Oscilloscope
Adjustment Page	D
Adjustment Address	34
Specified Value	A = $540 \pm 10$ mV

**Note 1:** Generate color bar signal with NTSC: DCR-VX1000/PAL: DCR-VX1000E and enter it to the DV terminal. (How to generate color bars: Connect the adjusting remote commander to the NTSC: DCR-VX1000/PAL: DCR-VX1000E, select page: 5, address: 02, and set data: 09. After adjustment, be sure to return the data to "00")

### Adjusting method:

- 1) Select page: 0, address: 01, and set data: 01.
- 2) Select page: D, address: 34, change data, and adjust the CR signal level (A) to the specified value.
- 3) Select page: 0, address: 01, and set data: 00.

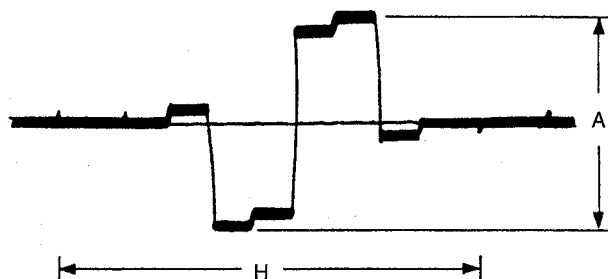


Fig. 5-3-10.

## 8. Playback CB Signal Level Adjustment (JC-19 Board)

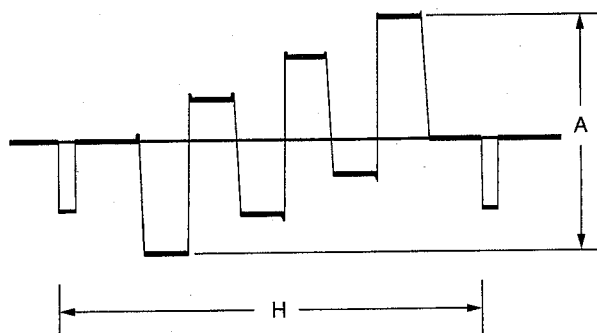
Mode	Recording
Signal	DV input (Note 1)
Measurement Point	Pin ⑫ of CN104 or pin ⑲ of CN102 on VA-106 board
Measuring Instrument	Oscilloscope
Adjustment Page	D
Adjustment Address	35
Specified Value	$A = 390 \pm 10 \text{ mV}$

**Note 1:** Generate color bar signal with NTSC: DCR-VX1000/PAL: DCR-VX1000E and enter it to the DV terminal. (How to generate color bars: Connect the adjusting remote commander to the NTSC: DCR-VX1000/PAL: DCR-VX1000E, select page: 5, address: 02, and set data: 09. After adjustment, be sure to return the data to "00")

### Adjusting method:

- 1) Select page: 0, address: 01, and set data: 00.
- 2) Select page: D, address: 35, change data, and adjust the CB signal level (A) to the specified value.
- 3) Select page: 0, address: 01, and set data: 00.

### For NTSC model



### For PAL model

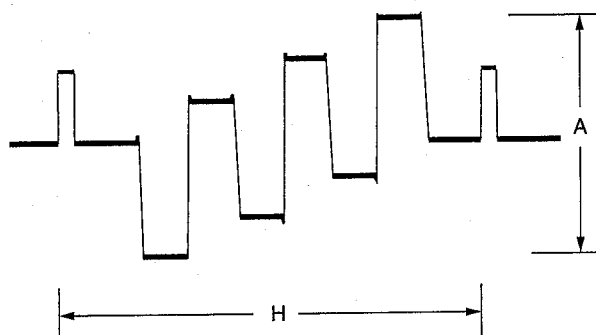


Fig. 5-3-11.

## 9. IC422 27MHz XTAL fo Adjustment (JC-19 Board)

Mode	Playback
Signal	Arbitrary tape
Measurement Point	Pin ⑳ of IC442 (CL479)
Measuring Instrument	Frequency counter
Adjustment Page	D
Adjustment Address	33
Specified Value	$f = 13500000 \pm 100 \text{ Hz}$

### Adjusting method:

- 1) Select page: 0, address: 01, and set data: 01.
- 2) Select page: D, address: 33, change data, and adjust the clock frequency (f) to the specified value.
- 3) Press the PAUSE button on the adjusting remote commander.
- 4) Select page: 0, address: 01, and set data: 00.

## 10. AFC Preliminary Adjustment (JC-19 Board)

Mode	Recording
Signal	Color bar
Measurement Point	Pin ⑨ of IC205 (CL214)
Measuring Instrument	Digital voltmeter
Adjusting Element	CT201
Specified Value	$A = 1.9 \pm 0.5 \text{ Vdc}$

### Adjusting method:

- 1) Set the DC voltage (A) to the specified value using CT201.

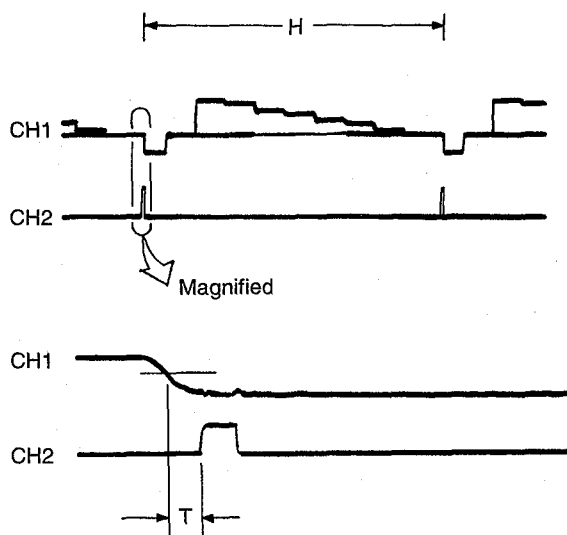
## 11. AFC Picture Frame Adjustment (JC-19 Board)

Mode	Recording
Signal	Color bar (Video input) (Note 1)
Measurement Point	CH1: Pin ② of IC017 (CL051) CH2: Pin ②⑧ of IC205 (CL222)
Measuring Instrument	Oscilloscope
Adjusting Element	RV201
Specified Value	$T = 110 \pm 10 \text{ nsec}$

**Note 1:** Set "VIDEO" mode with the INPUT SELECT button on the front panel.

### Adjusting method:

- 1) Set the time difference (T) between the H SYNC falling and AFH rising to the specified value using RV201.



**Fig. 5-3-12.**

## 12. AFC Adjustment (JC-19 Board)

Mode	Recording
Signal	Color bar
Measurement Point	Pin ⑨ of IC205 (CL214)
Measuring Instrument	Digital voltmeter
Adjusting Element	CT201
Specified Value	$A = 1.80 \pm 0.05 \text{ Vdc}$

### Adjusting method:

- 1) Set the DC voltage (A) to the specified value using CT201.

### 3-5-3. General Adjustments

#### 1. Playback Y/CR Delay Adjustment (VA-106 Board)

Mode	E-E
Signal	Color bar (DV input) (Note 1)
Measurement point	CH1: Component Y output terminal CH2: Component R-Y output terminal
Measuring Instrument	Oscilloscope (Overlay displayed)
Adjustment Page	E
Adjustment Address	6B
Specified Value	A = B ( $\pm 20$ nsec or less)

**Note 1:** Set "DV" mode with the INPUT SELECT button on the front panel. Generate color bar signal with NTSC: DCR-VX1000/PAL: DCR-VX1000E and enter it to the DV terminal. (How to generate color bars: Connect the adjusting remote commander to the NTSC: DCR-VX1000/PAL: DCR-VX1000E, select page: 5, address: 02, and set data: 09. After adjustment, be sure to return the data to "00")

##### Adjusting method:

- 1) Select page: 0, address: 01, and set data: 01.
- 2) Select page: E, address: 6B, and change data to adjust so that the Y signal and R-Y signal cross at the boundary of green and magenta with A-B. Then, press the PAUSE button of the adjusting remote commander.
- 3) Select page: 0, address: 01, and set data: 00.

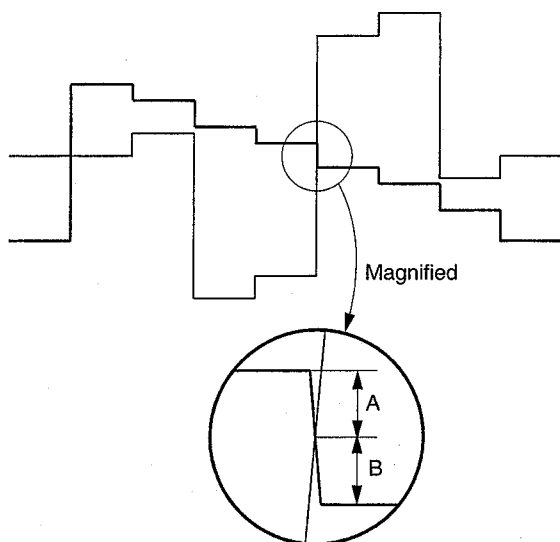


Fig. 5-3-13.

#### 2. Playback Y/CB Delay Adjustment (VA-106 Board)

Mode	E-E
Signal	Color bar (DV input) (Note 1)
Measurement point	CH1: Component Y output terminal CH2: Component B-Y output terminal
Measuring Instrument	Oscilloscope (Overlay displayed)
Adjustment Page	E
Adjustment Address	6C
Specified Value	A = B ( $\pm 20$ nsec or less)

**Note 1:** Set "DV" mode with the INPUT SELECT button on the front panel. Generate color bar signal with NTSC: DCR-VX1000/PAL: DCR-VX1000E and enter it to the DV terminal. (How to generate color bars: Connect the adjusting remote commander to the NTSC: DCR-VX1000/PAL: DCR-VX1000E, select page: 5, address: 02, and set data: 09. After adjustment, be sure to return the data to "00")

##### Adjusting method:

- 1) Select page: 0, address: 01, and set data: 01.
- 2) Select page: E, address: 6C, and change data to adjust so that the Y signal and B-Y signal cross at the boundary of green and magenta with A-B. Then, press the PAUSE button of the adjusting remote commander.
- 3) Select page: 0, address: 01, and set data: 00.

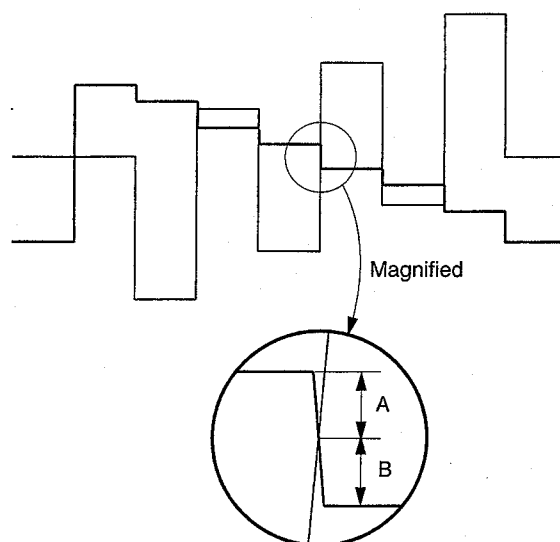


Fig. 5-3-14.



### 3. Playback Y Signal Level Adjustment (VA-106 Board)

Mode	E-E
Signal	Color bar (DV input) (Note 1)
Measurement point	Componet Y output terminal
Measuring Instrument	Oscilloscope
Adjustment Page	E
Adjustment Address	44
Specified Value	A = $714 \pm 7$ mV (NTSC) A = $700 \pm 7$ mV (PAL)

**Note 1:** Set "DV" mode with the INPUT SELECT button on the front panel. Generate color bar signal with NTSC: DCR-VX1000/PAL: DCR-VX1000E and enter it to the DV terminal. (How to generate color bars: Connect the adjusting remote commander to the NTSC: DCR-VX1000/PAL: DCR-VX1000E, select page: 5, address: 02, and set data: 09. After adjustment, be sure to return the data to "00")

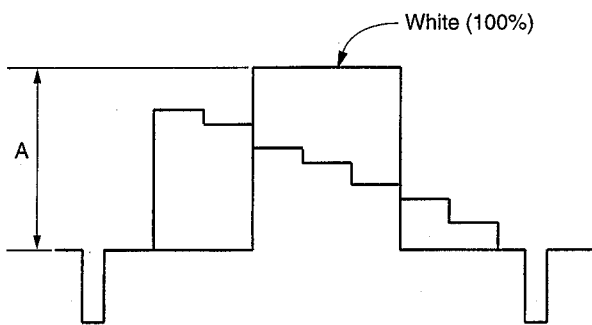
**Note 2:** Perform this adjustment after confirming that the specified value in the following adjustment of the JC-19 board has been satisfied.

1. Playback CR Signal Level Adjustment.

#### Adjusting method:

- 1) Select page: 0, address: 01, and set data: 01.
- 2) Select page: E, address: 44, change the data, adjust the white (100%) signal level (A) to the specified value, and press the PAUSE button of the adjusting remote commander.
- 3) Select page: 0, address: 01, and set data: 00.

#### For NTSC model



#### For PAL model

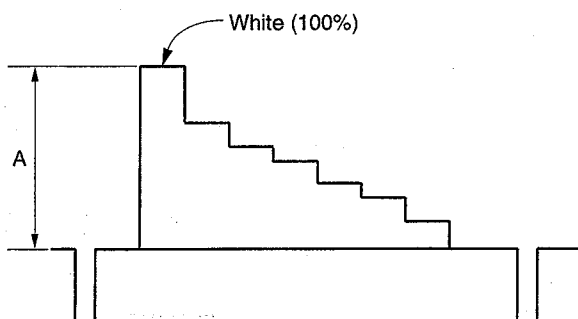


Fig. 5-3-15.

### 4. Playback Setup Level Adjustment (VA-106 Board)

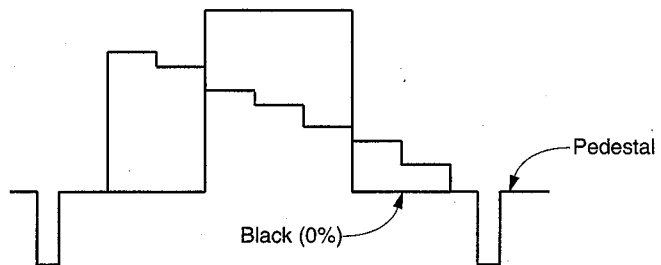
Mode	E-E
Signal	Color bar (DV input) (Note 1)
Measurement point	Componet Y output terminal
Measuring Instrument	Oscilloscope
Adjustment Page	E
Adjustment Address	62
Specified Value	Black level = Pedestal level

**Note 1:** Set "DV" mode with the INPUT SELECT button on the front panel. Generate color bar signal with NTSC: DCR-VX1000/PAL: DCR-VX1000E and enter it to the DV terminal. (How to generate color bars: Connect the adjusting remote commander to the NTSC: DCR-VX1000/PAL: DCR-VX1000E, select page: 5, address: 02, and set data: 09. After adjustment, be sure to return the data to "00")

#### Adjusting method:

- 1) Select page: 0, address: 01, and set data: 01.
- 2) Select page: E, address: 62, and change data to adjust so that the black (0%) signal level becomes same as pedestal. Then, press the PAUSE button of the adjusting remote commander.
- 3) Select page: 0, address: 01, and set data: 00

#### For NTSC model



#### For PAL model

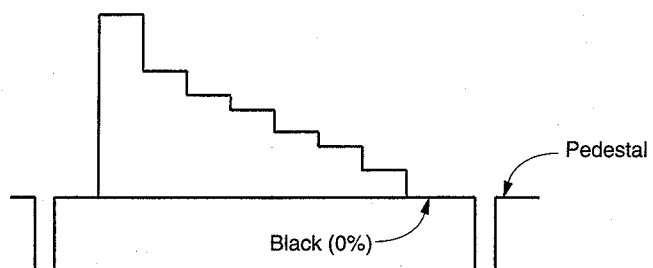


Fig. 5-3-16.

### 5. Playback CR Signal Level Adjustment (VA-106 Board)

Mode	E-E
Signal	Color bar (DV input) (Note 1)
Measurement point	Componet R-Y output terminal
Measuring Instrument	Oscilloscope
Adjustment Page	E
Adjustment Address	48
Specified Value	A = $756.8 \pm 7$ mVp-p (NTSC) A = $525 \pm 7$ mVp-p (PAL)

**Note 1:** Set "DV" mode with the INPUT SELECT button on the front panel. Generate color bar signal with NTSC: DCR-VX1000/PAL: DCR-VX1000E and enter it to the DV terminal. (How to generate color bars: Connect the adjusting remote commander to the NTSC: DCR-VX1000/PAL: DCR-VX1000E, select page: 5, address: 02, and set data: 09. After adjustment, be sure to return the data to "00")

**Note 2:** Perform this adjustment after confirming that the specified value in the following adjustment of the JC-19 board has been satisfied.  
1. Playback CR Signal Level Adjustment.

#### Adjusting method:

- 1) Select page: 0, address: 01, and set data: 01.
- 2) Select page: E, address: 48, change the data, adjust the R-Y signal level (A) to the specified value, and press the PAUSE button of the adjusting remote commander.
- 3) Select page: 0, address: 01, and set data: 00.

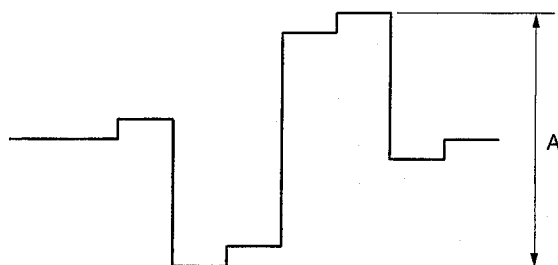


Fig. 5-3-17.

### 6. Playback CB Signal Level Adjustment (VA-106 Board)

Mode	E-E
Signal	Color bar (DV input) (Note 1)
Measurement point	Componet B-Y output terminal
Measuring Instrument	Oscilloscope
Adjustment Page	E
Adjustment Address	46
Specified Value	A = $756.8 \pm 7$ mVp-p (NTSC) A = $525 \pm 7$ mVp-p (PAL)

**Note 1:** Set "DV" mode with the INPUT SELECT button on the front panel. Generate color bar signal with NTSC: DCR-VX1000/PAL: DCR-VX1000E and enter it to the DV terminal. (How to generate color bars: Connect the adjusting remote commander to the NTSC: DCR-VX1000/PAL: DCR-VX1000E, select page: 5, address: 02, and set data: 09. After adjustment, be sure to return the data to "00")

**Note 2:** Perform this adjustment after confirming that the specified value in the following adjustment of the JC-19 board has been satisfied.  
1. Playback CB Signal Level Adjustment.

#### Adjusting method:

- 1) Select page: 0, address: 01, and set data: 01.
- 2) Select page: E, address: 46, change the data, adjust the B-Y signal level (A) to the specified value, and press the PAUSE button of the adjusting remote commander.
- 3) Select page: 0, address: 01, and set data: 00.

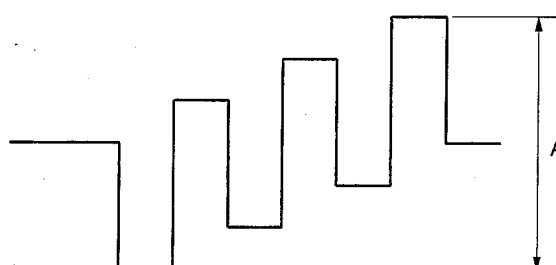


Fig. 5-3-18.

## 7. Playback Sync Level Adjustment (VA-106 Board)

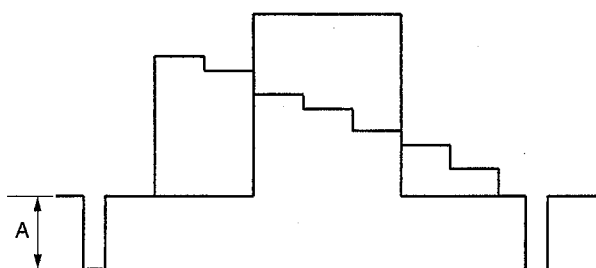
Mode	E-E
Signal	Color bar (DV input) (Note 1)
Measurement point	Componet Y output terminal
Measuring Instrument	Oscilloscope
Adjustment Page	E
Adjustment Address	6D
Specified Value	A = $286 \pm 3$ mV (NTSC) A = $300 \pm 3$ mV (PAL)

**Note 1:** Set "DV" mode with the INPUT SELECT button on the front panel. Generate color bar signal with NTSC: DCR-VX1000/PAL: DCR-VX1000E and enter it to the DV terminal. (How to generate color bars: Connect the adjusting remote commander to the NTSC: DCR-VX1000/PAL: DCR-VX1000E, select page: 5, address: 02, and set data: 09. After adjustment, be sure to return the data to "00")

### Adjusting method:

- 1) Select page: 0, address: 01, and set data: 01.
- 2) Select page: E, address: 6D, change the data, adjust the Y signal SYNC level (A) to the specified value, and press the PAUSE button of the adjusting remote commander.
- 3) Select page: 0, address: 01, and set data: 00.

### For NTSC model



### For PAL model

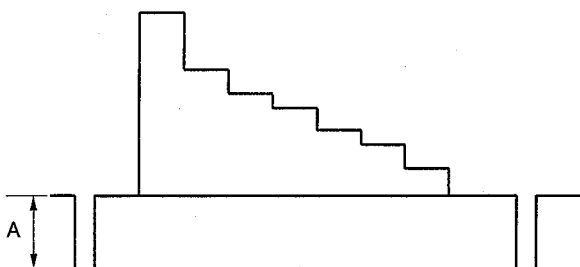


Fig. 5-3-19.

## 8. Playback Carrier Balance Adjustment (VA-106 Board)

Mode	E-E
Signal	Color bar (DV input) (Note 1)
Measurement point	Composite VIDEO output terminal
Measuring Instrument	Vectorscope, Oscilloscope
Adjustment Page	E
Adjustment Address	71, 72
Specified Value	A = 15 mVp-p or less

**Note 1:** Set "DV" mode with the INPUT SELECT button on the front panel. Generate color bar signal with NTSC: DCR-VX1000/PAL: DCR-VX1000E and enter it to the DV terminal. (How to generate color bars: Connect the adjusting remote commander to the NTSC: DCR-VX1000/PAL: DCR-VX1000E, select page: 5, address: 02, and set data: 09. After adjustment, be sure to return the data to "00")

### For NTSC model

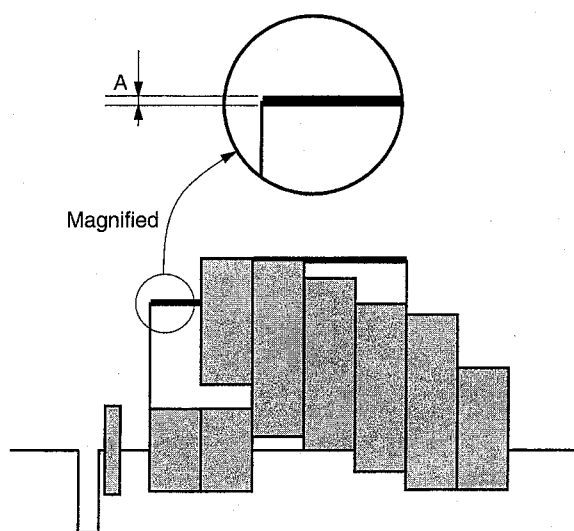
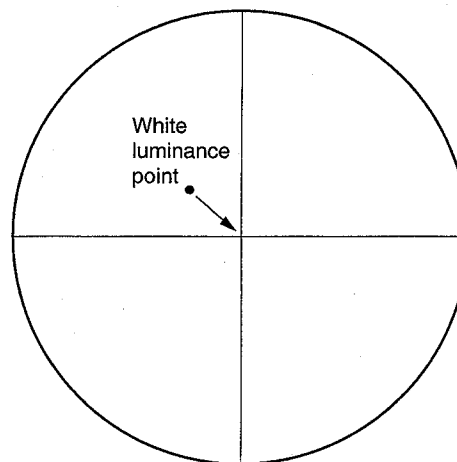


Fig. 5-3-20.

### Adjusting method:

- 1) Select page: 0, address: 01, and set data: 01.
- 2) Select page: E, address: 71, 72 and change data to adjust with the vectorscope (use with large gain in UNCAL mode) so that a white luminance point of video signal coincides with the center. Then, press the PAUSE button of the adjusting remote commander.
- 3) Confirm with the oscilloscope that the carrier (A) of white part of color bars satisfies the specified value.
- 4) Select page: 0, address: 01, and set data: 00.

### For PAL model

PAL model is two white luminance points.

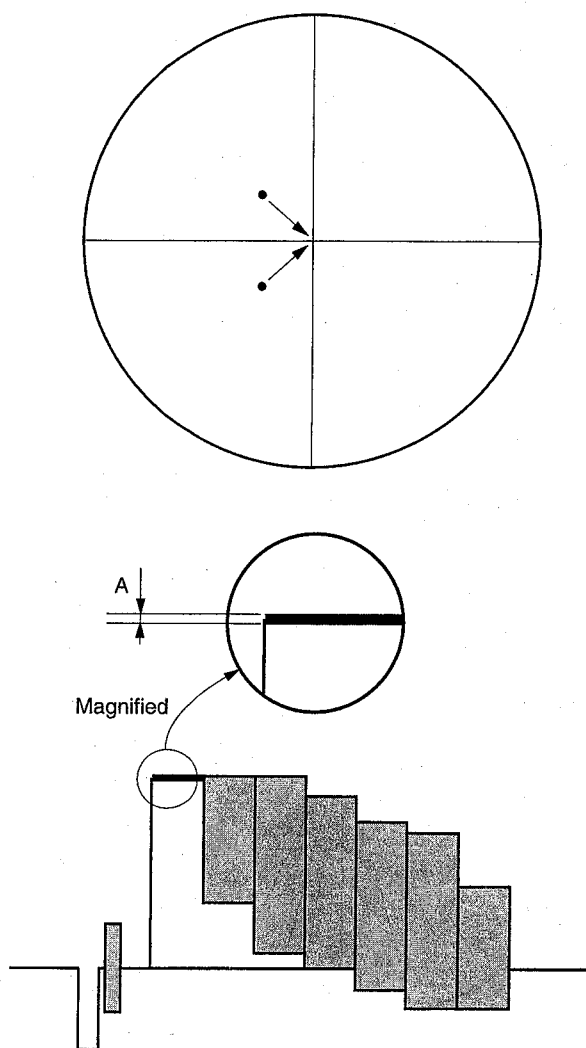


Fig. 5-3-21.

### 9. Playback Burst Level Adjustment (VA-106 Board)

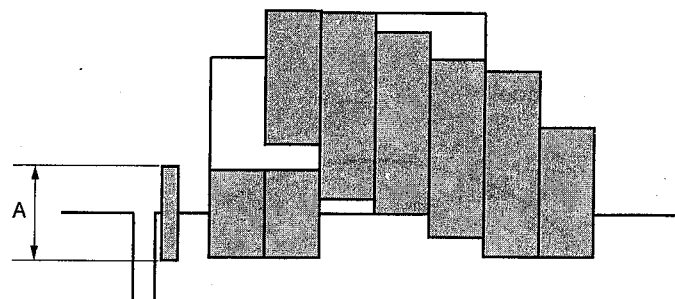
Mode	E-E
Signal	Color bar (DV input) (Note 1)
Measurement point	Composite VIDEO output terminal
Measuring Instrument	Oscilloscope
Adjustment Page	E
Adjustment Address	6F (NTSC) 6F, 70 (PAL)
Specified Value	A = $286 \pm 2$ mV (NTSC) A = $300 \pm 2$ mV (PAL)

**Note 1:** Set "DV" mode with the INPUT SELECT button on the front panel. Generate color bar signal with NTSC: DCR-VX1000/PAL: DCR-VX1000E and enter it to the DV terminal. (How to generate color bars: Connect the adjusting remote commander to the NTSC: DCR-VX1000/PAL: DCR-VX1000E, select page: 5, address: 02, and set data: 09. After adjustment, be sure to return the data to "00")

### Adjusting method:

- 1) Select page: 0, address: 01, and set data: 01.
- 2) Select page: E, address: (6F: NTSC, 6F and 70: PAL), change the data, adjust the VIDEO signal burst level (A) to the specified value, and press the PAUSE button of the adjusting remote commander.
- 3) Select page: 0, address: 01, and set data: 00

### For NTSC model



### For PAL model

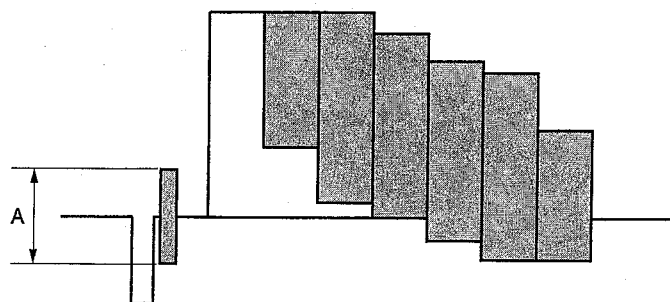


Fig. 5-3-22.

### 10. Playback Composite VIDEO Chroma (R-Y Signal Level) Adjustment (VA-106 Board)

Mode	E-E
Signal	Color bar (DV input) (Note 1)
Measurement point	Composite VIDEO output terminal
Measuring Instrument	Vectorscope
Adjustment Page	E
Adjustment Address	42
Specified Value	Phase: $102 \pm 2.5^\circ$ (NTSC) $102 \pm 3^\circ$ (PAL) Gain: $630 \pm 18\text{mV}$ (NTSC) $630 \pm 35\text{mV}$ (PAL)

**Note 1:** Set "DV" mode with the INPUT SELECT button on the front panel. Generate color bar signal with NTSC: DCR-VX1000/PAL: DCR-VX1000E and enter it to the DV terminal. (How to generate color bars: Connect the adjusting remote commander to the NTSC: DCR-VX1000/PAL: DCR-VX1000E, select page: 5, address: 02, and set data: 09. After adjustment, be sure to return the data to "00")

#### Adjusting method:

- 1) Select page: 0, address: 01, and set data: 01.
- 2) Adjust the burst luminance point to the specified position using the PHASE and GAIN knobs of the vectorscope.
- 3) Select page: E, address: 42, change the data, adjust a red luminance point to the specified position (inside of thick frame), and press the PAUSE button of the adjusting remote commander.
- 4) select page: 0, address: 01, and set data: 00.

#### For NTSC model

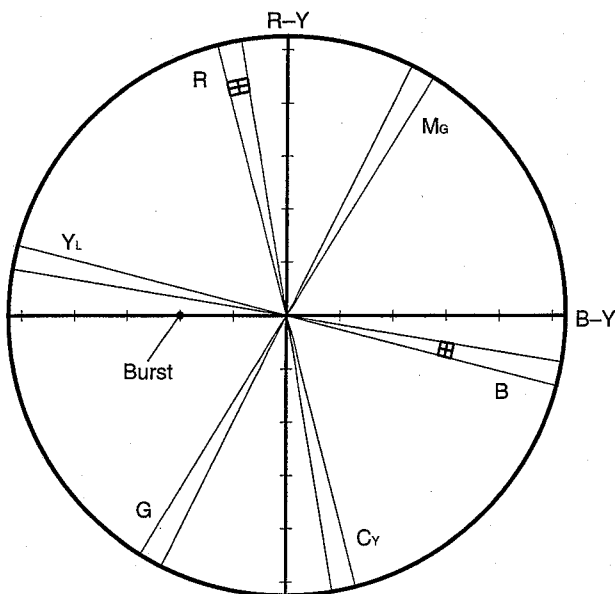


Fig. 5-3-23.

### 11. Playback Composite VIDEO Chroma (B-Y Signal Level) Adjustment (VA-106 Board)

Mode	E-E
Signal	Color bar (DV input) (Note 1)
Measurement point	Composite VIDEO output terminal
Measuring Instrument	Vectorscope
Adjustment Page	E
Adjustment Address	40
Specified Value	Phase: $348 \pm 2.5^\circ$ (NTSC) $348 \pm 3^\circ$ (PAL) Gain: $440 \pm 18\text{mV}$ (NTSC) $440 \pm 35\text{mV}$ (PAL)

**Note 1:** Set "DV" mode with the INPUT SELECT button on the front panel. Generate color bar signal with NTSC: DCR-VX1000/PAL: DCR-VX1000E and enter it to the DV terminal. (How to generate color bars: Connect the adjusting remote commander to the NTSC: DCR-VX1000/PAL: DCR-VX1000E, select page: 5, address: 02, and set data: 09. After adjustment, be sure to return the data to "00")

#### Adjusting method:

- 1) Select page: 0, address: 01, and set data: 01.
- 2) Adjust the burst luminance point to the specified position using the PHASE and GAIN knobs of the vectorscope.
- 3) Select page: E, address: 40, change the data, adjust a blue luminance point to the specified position (inside of thick frame), and press the PAUSE button of the adjusting remote commander.
- 4) Select page: 0, address: 01, and set data: 00.

#### For PAL model

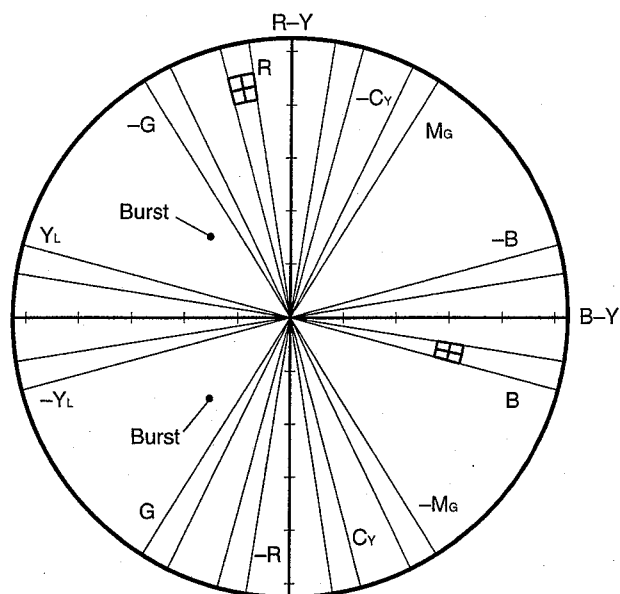


Fig. 5-3-24.

## 12. Playback Composite VIDEO Chroma (R-Y Phase) Adjustment (VA-106 Board)

Mode	E-E
Signal	Color bar (DV input) (Note 1)
Measurement point	Composite VIDEO output terminal
Measuring Instrument	Vectorscope
Adjustment Page	E
Adjustment Address	74
Specified Value	Phase: $102 \pm 2.5^\circ$ (NTSC) $102 \pm 3^\circ$ (PAL) Gain: $630 \pm 18\text{mV}$ (NTSC) $630 \pm 35\text{mV}$ (PAL)

**Note 1:** Set "DV" mode with the INPUT SELECT button on the front panel. Generate color bar signal with NTSC: DCR-VX1000/PAL: DCR-VX1000E and enter it to the DV terminal. (How to generate color bars: Connect the adjusting remote commander to the NTSC: DCR-VX1000/PAL: DCR-VX1000E, select page: 5, address: 02, and set data: 09. After adjustment, be sure to return the data to "00")

### Adjusting method:

- 1) Select page: 0, address: 01, and set data: 01.
- 2) Adjust the burst luminance point to the specified position using the PHASE and GAIN knobs of the vectorscope.
- 3) Select page: E, address: 74, change the data, adjust a red luminance point to the specified position (inside of thick frame), and press the PAUSE button of the adjusting remote commander.
- 4) At this time, confirm that other color luminance points are inside each phase specified frame ( $\pm 2.5^\circ$ : NTSC,  $\pm 3^\circ$ : PAL).
- 5) Select page: 0, address: 01, and set data: 00.

## 13. INT Subcarrier Frequency Adjustment (GL-10 Board)

Mode	E-E
Signal	Color bar (DV input) (Note 1)
Measurement point	Composite VIDEO output terminal
Measuring Instrument	Pattern generator (External synchronization mode) Frequency counter (Note 2)
Adjustment Page	E
Adjustment Address	73
Specified Value	$f = 3579545 \pm 5 \text{ Hz}$ (NTSC) $f = 4433619 \pm 5 \text{ Hz}$ (PAL)

**Note 1:** Set "DV input" mode with the INPUT SELECT button on the front panel. Generate color bar signal with NTSC: DCR-VX1000/PAL: DCR-VX1000E and enter it to the DV terminal. (How to generate color bars: Connect the adjusting remote commander to the NTSC: DCR-VX1000/PAL: DCR-VX1000E, select page: 5, address: 02, and set data: 09. After adjustment, be sure to return the data to "00")

**Note 2:** Connection of equipment

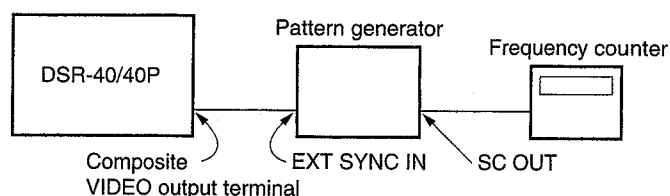


Fig. 5-3-25.

### Adjusting method:

- 1) Select page: 0, address: 01, and set data: 01.
- 2) Select page: E, address: 73, change the data, adjust the INT subcarrier frequency ( $f$ ) to the specified value, and press the PAUSE button of the adjusting remote commander.
- 3) Select page: 0, address: 01, and set data: 00

## 14. Decoder Freerunning Frequency Adjustment (VA-106 Board)

Mode	E-E
Signal	Color bar (Burst signal, Chroma signal OFF) (S VIDEO input) (Note 1)
Measurement point	TP201
Measuring Instrument	Frequency counter (Note 2)
Adjusting Element	CT201
Specified Value	$f=3579545 \pm 20 \text{ Hz}$ (NTSC) $f=4433619 \pm 20 \text{ Hz}$ (PAL)

**Note 1:** Set "S VIDEO" mode with the INPUT SELECT button on the front panel.

**Note 2:** Connect the frequency counter via high input impedance equipment such as an oscilloscope.

### Adjusting method:

- 1) Set the Decoder freerunning frequency ( $f$ ) to the specified value using CT201.

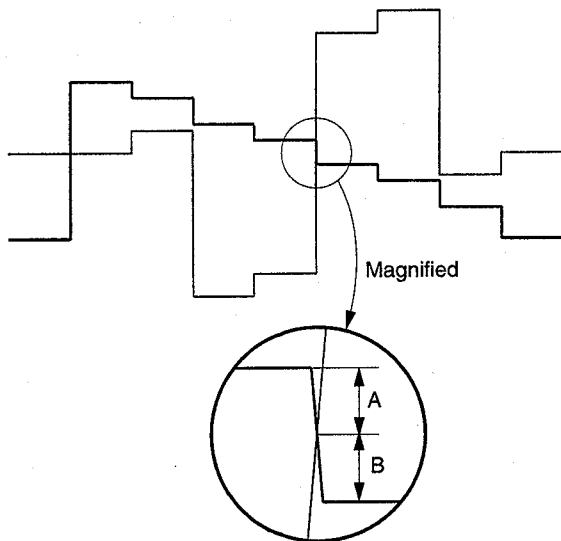
### 15. Recording Y/CR Delay Adjustment (VA-106 Board)

Mode	E-E
Signal	Color bar (S VIDEO input) (Note 1)
Measurement point	CH1: Component Y output terminal CH2: Component R-Y output terminal
Measuring Instrument	Oscilloscope (Overlay displayed)
Adjustment Page	E
Adjustment Address	69
Specified Value	A = B ( $\pm 20$ nsec or less)

**Note 1:** Set "S VIDEO" mode with the INPUT SELECT button on the front panel.

#### Adjusting method:

- 1) Select page: 0, address: 01, and set data: 01.
- 2) Select page: E, address: 69, and change data to adjust so that the Y signal and R-Y signal cross at the boundary of green and magenta with A-B. Then, press the PAUSE button of the adjusting remote commander.
- 3) Select page: 0, address: 01, and set data: 00.



**Fig. 5-3-26.**

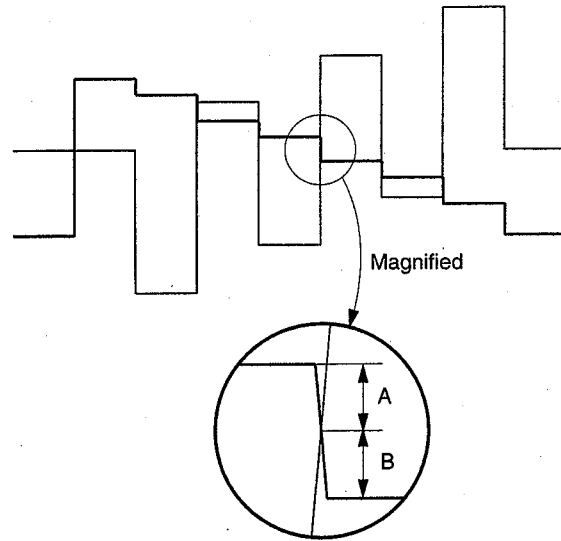
### 16. Recording Y/CB Delay Adjustment (VA-106 Board)

Mode	E-E
Signal	Color bar (S VIDEO input) (Note 1)
Measurement point	CH1: Component Y output terminal CH2: Component B-Y output terminal
Measuring Instrument	Oscilloscope (Overlay displayed)
Adjustment Page	E
Adjustment Address	68
Specified Value	A = B ( $\pm 20$ nsec or less)

**Note 1:** Set "S VIDEO" mode with the INPUT SELECT button on the front panel.

#### Adjusting method:

- 1) Select page: 0, address: 01, and set data: 01.
- 2) Select page: E, address: 68, and change data to adjust so that the Y signal and B-Y signal cross at the boundary of green and magenta with A-B. Then, press the PAUSE button of the adjusting remote commander.
- 3) Select page: 0, address: 01, and set data: 00.



**Fig. 5-3-27.**



### 17. Recording Y Signal Level Adjustment (VA-106 Board)

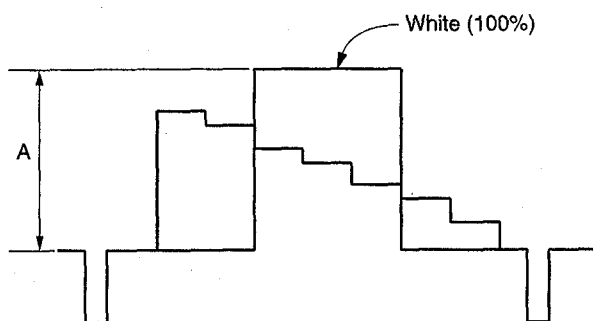
Mode	E-E
Signal	Color bar (S VIDEO input) (Note 1)
Measurement point	Componet Y output terminal
Measuring Instrument	Oscilloscope
Adjustment Page	E
Adjustment Address	64
Specified Value	A = $714 \pm 7$ mV (NTSC) A = $700 \pm 7$ mV (PAL)

**Note 1:** Set "S VIDEO" mode with the INPUT SELECT button on the front panel.

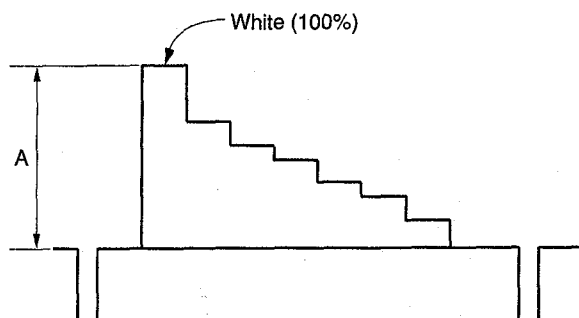
#### Adjusting method:

- 1) Select page: 0, address: 01, and set data: 01.
- 2) Select page: E, address: 64, change the data, adjust the white (100%) signal level (A) to the specified value, and press the PAUSE button of the adjusting remote commander.
- 3) Select page: 0, address: 01, and set data: 00.

#### For NTSC model



#### For PAL model



**Fig. 5-3-28.**

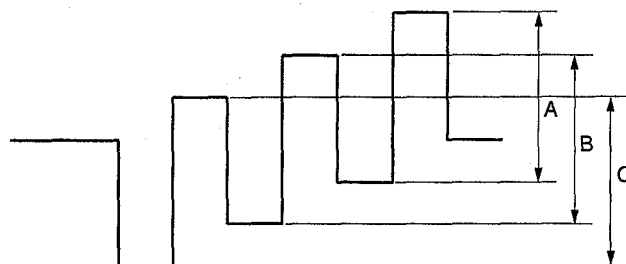
### 18. Recording Chroma Decoder HUE Adjustment (VA-106 Board)

Mode	E-E
Signal	Color bar (S VIDEO input) (Note 1)
Measurement point	Componet B-Y output terminal
Measuring Instrument	Oscilloscope
Adjustment Page	E
Adjustment Address	63
Specified Value	A = B = C

**Note 1:** Set "S VIDEO" mode with the INPUT SELECT button on the front panel.

#### Adjusting method:

- 1) Select page: 0, address: 01, and set data: 01.
- 2) Select page: E, address: 63, and change data to adjust so that A, B, and C amplitudes of B-Y signal are equal. Then, press the PAUSE button of the adjusting remote commander.
- 3) Select page: 0, address: 01, and set data: 00.



**Fig. 5-3-29.**

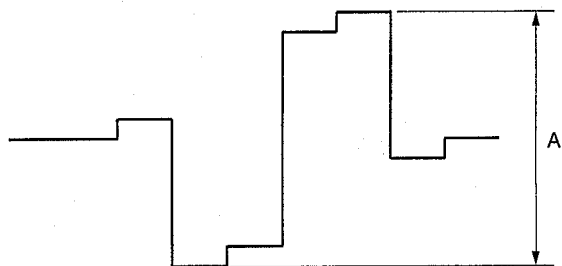
### 19. Recording CR Signal Level Adjustment (VA-106 Board)

Mode	E-E
Signal	Color bar (S VIDEO input) (Note 1)
Measurement point	Componet R-Y output terminal
Measuring Instrument	Oscilloscope
Adjustment Page	E
Adjustment Address	66
Specified Value	A = $756.8 \pm 7$ mVp-p (NTSC) A = $525 \pm 7$ mVp-p (PAL)

**Note 1:** Set "S VIDEO" mode with the INPUT SELECT button on the front panel.

#### Adjusting method:

- 1) Select page: 0, address: 01, and set data: 01.
- 2) Select page: E, address: 66, change the data, adjust the R-Y signal level (A) to the specified value, and press the PAUSE button of the adjusting remote commander.
- 3) Select page: 0, address: 01, and set data: 00.



**Fig. 5-3-30.**

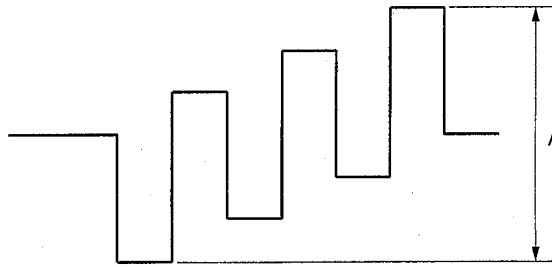
### 20. Recording CB Signal Level Adjustment (VA-106 Board)

Mode	E-E
Signal	Color bar (S VIDEO input) (Note 1)
Measurement point	Componet B-Y output terminal
Measuring Instrument	Oscilloscope
Adjustment Page	E
Adjustment Address	65
Specified Value	A = $756.8 \pm 7$ mVp-p (NTSC) A = $525 \pm 7$ mVp-p (PAL)

**Note 1:** Set "S VIDEO" mode with the INPUT SELECT button on the front panel.

#### Adjusting method:

- 1) Select page: 0, address: 01, and set data: 01.
- 2) Select page: E, address: 65, change the data, adjust the B-Y signal level (A) to the specified value, and press the PAUSE button of the adjusting remote commander.
- 3) Select page: 0, address: 01, and set data: 00.



**Fig. 5-3-31.**

## 21. SYNC Position Adjustment (GL-10 Board)

Mode	Playback
Signal	Arbitrary tape Black burst (REF.VIDEO input)
Measurement point	CH1: Black burst (The same signal that REF.VIDEO input) CH2: Composite VIDEO output
Measuring Instrument	Oscilloscope
Adjustment Page	E
Adjustment Address	56 (Coarse), 54 (Fine)
Specified Value	$T = 0 \pm 10 \text{ nsec}$

**Note 1:** Set "S VIDEO" mode with the INPUT SELECT button on the front panel.

### Adjusting method:

- 1) Select page: 0, address: 01, and set data: 01.
- 2) Select page: E, address: 56, 54, and change data to adjust so that the difference in SYNC fall time (T) between CH1 and CH2 satisfies the specified value. Then, press the PAUSE button of the adjusting remote commander.
- 3) Select page: 0, address: 01, and set data: 00.

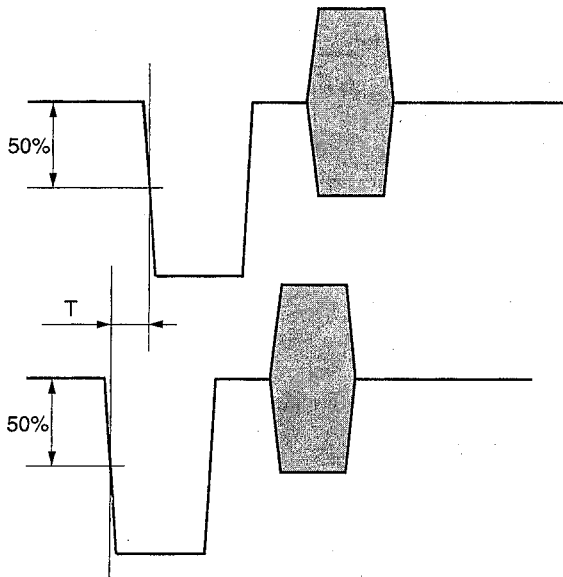


Fig. 5-3-32.

## 22. EXT Subcarrier Phase Adjustment (GL-10 Board)

Mode	Playback
Signal	Arbitrary tape Black burst (REF.VIDEO input)
Measurement point	CH1: Black burst (The same signal that REF.VIDEO input) CH2: Composite VIDEO output
Measuring Instrument	Vectorscope (SC PHASE displayed mode)
Adjustment Page	E
Adjustment Address	4E
Specified Value	Phase: $0 \pm 0.5^\circ$

**Note 1:** Set "S VIDEO" mode with the INPUT SELECT button on the front panel.

### Adjusting method:

- 1) Select page: 0, address: 01, and set data: 01.
- 2) Adjust the phase of black burst to horizontal axis.
- 3) Select page: E, address: 4E, and change data to adjust so that the phase of composite video output becomes  $0 \pm 0.5^\circ$ . Then, press the PAUSE button of the adjusting remote commander.
- 4) Select page: 0, address: 01, and set data: 00.

### 23. Burst Position Adjustment (GL-10 Board)

Mode	E-E
Signal	Color bar (DV input) (Note 1)
Measurement point	Composite VIDEO output
Measuring Instrument	Oscilloscope
Adjustment Page	E
Adjustment Address	52 (Coarse), 53 (Fine)
Specified Value	$T = 0.6 \pm 0.1 \mu\text{sec}$ (NTSC) $T = 0.9 \pm 0.1 \mu\text{sec}$ (PAL)

**Note 1:** Set "DV input" mode with the INPUT SELECT button on the front panel. Generate color bar signal with NTSC: DCR-VX1000/PAL: DCR-VX1000E and enter it to the DV terminal.

(How to generate color bars: Connect the adjusting remote commander to the NTSC: DCR-VX1000/PAL: DCR-VX1000E, select page: 5, address: 02, and set data: 09. After adjustment, be sure to return the data to "00")

#### Adjusting method:

- 1) Select page: 0, address: 01, and set data: 01.
- 2) Select page: E, addresses: 52, 53, and change data to adjust so that the time (T) from 50% position of SYNC leading edge to 50% position of burst leading edge satisfies the specified value. Then, press the PAUSE button of the adjusting remote commander.
- 3) Select page: 0, address: 01, and set data: 00

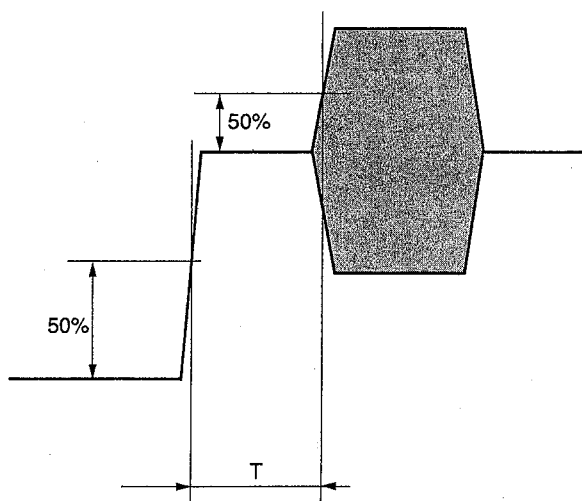


Fig. 5-3-33.

### 24. Y/C Separation Adjustment (VA-106 Board)

#### (1) Y Signal Level Adjustment

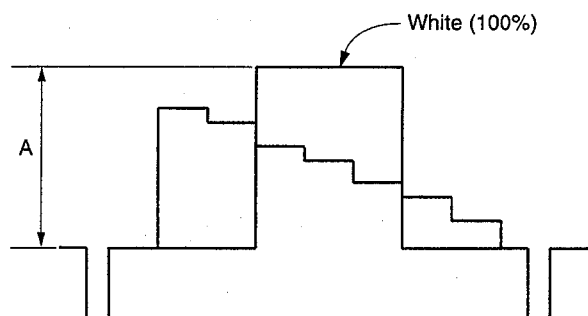
Mode	E-E
Signal	Color bar (VIDEO input) (Note 1)
Measurement point	Componet Y output terminal
Measuring Instrument	Oscilloscope
Adjustment Page	E
Adjustment Address	60
Specified Value	$A = 714 \pm 7 \text{ mVp-p}$ (NTSC) $A = 700 \pm 7 \text{ mVp-p}$ (PAL)

**Note 1:** Set "VIDEO" mode with the INPUT SELECT button on the front panel.

#### Adjusting method:

- 1) Select page: 0, address: 01, and set data: 01.
- 2) Select page: E, address: 60, change the data, adjust the Y signal level (A) to the specified value, and press the PAUSE button of the adjusting remote commander.
- 3) Select page: 0, address: 01, and set data: 00.

#### For NTSC model



#### For PAL model

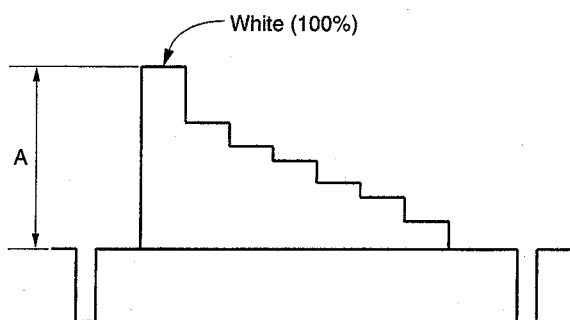


Fig. 5-3-34.

## (2) Chroma Signal Level Adjustment

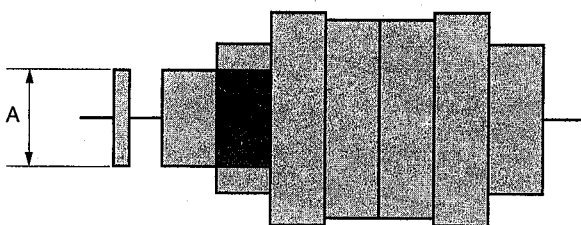
Mode	E-E
Signal	Color bar (VIDEO input) (Note 1)
Measurement point	S VIDEO output (C) terminal
Measuring Instrument	Oscilloscope
Adjustment Page	E
Adjustment Address	61
Specified Value	A = $286 \pm 10$ mVp-p (NTSC) A = $300 \pm 10$ mVp-p (PAL)

**Note 1:** Set "S VIDEO" mode with the INPUT SELECT button on the front panel.

### Adjusting method:

- 1) Select page: 0, address: 01, and set data: 01.
- 2) Select page: E, address: 61, change the data, adjust the burst signal level (A) to the specified value, and press the PAUSE button of the adjusting remote commander.
- 3) Select page: 0, address: 01, and set data: 00.

### For NTSC model



### For PAL model

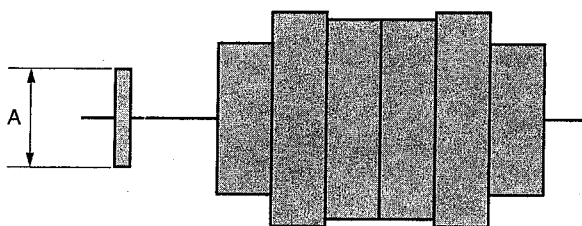


Fig. 5-3-35.

## 25. OSD1 Subcarrier Adjustment (VA-106 Board)

Mode	E-E
Signal	No signal (S VIDEO input) (Note 1)
Measurement point	MONITOR VIDEO output terminal
Measuring Instrument	Pattern generator (External synchronization mode) Frequency counter (Note 2)
Adjustment Page	E
Adjustment Address	75
Specified Value	f = $3579545 \pm 15$ Hz (NTSC) f = $4433619 \pm 15$ Hz (PAL)

**Note 1:** Set "S VIDEO" mode with the INPUT SELECT button on the front panel.

**Note 2:** Connection of equipment

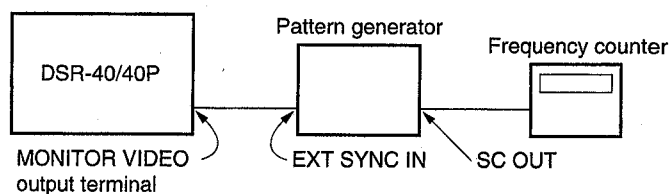


Fig. 5-3-36.

### Adjusting method:

- 1) Select page: 0, address: 01, and set data: 01.
- 2) Select page: E, address: 75, and change the data, adjust OSD1 subcarrier frequency (f) to the specified value, and press the PAUSE button of the adjusting remote commander.
- 3) Select page: 0, address: 01, and set data: 00.

## 26. OSD2 Subcarrier Adjustment (VA-106 Board)

Mode	E-E
Signal	No signal (S VIDEO input) (Note 1)
Measurement point	MONITOR VIDEO output terminal
Measuring Instrument	Pattern generator (External synchronization mode) Frequency counter (Note 2)
Adjustment Page	E
Adjustment Address	76
Specified Value	f = $3579545 \pm 15$ Hz (NTSC) f = $4433619 \pm 15$ Hz (PAL)

**Note 1:** Set "S VIDEO" mode with the INPUT SELECT button on the front panel.

**Note 2:** Connection is refer to "Fig. 5-3-36".

### Adjusting method:

- 1) Select page: 0, address: 01, and set data: 01.
- 2) Open the SEARCH screen using the MENU button on the front panel.
- 3) Select page: E, address: 76, change the data, adjust OSD2 subcarrier frequency (f) to the specified value, and press the PAUSE button of the adjusting remote commander.
- 4) Select page: 0, address: 01, and set data: 00.

### 3-5-4. BIST Check

#### 1. Playback System Check (JC-19, RP-228 Boards)

- 1) Connect the adjusting remote commander to the LANC terminal, and turn the HOLD switch ON.
- 2) Playback the BIST check tape.

#### IC411(D1) Playback System Check

- 3) Select page: 4, address: 11, set data: 04, and press the PAUSE button.
- 4) Select page: 4, address: 11, set data: 00, and press the PAUSE button.
- 5) Select page: 4, address: 13, set data: 03, and press the PAUSE button.  
(Data automatically returns to "00")
- 6) If IC411 (D1) → IC401 (U1) playback system is normal, the following data are displayed on page: 4, addresses: 14, 15.

Page	Address	Data
4	15	E5
4	14	11

- 7) If IC411(D1) → IC701 (IND1) playback system is normal, the following data are displayed on page: 4, addresses: 16, 17.

Page	Address	Data
4	17	C0 or BA
4	16	6E or 04

- 8) If IC411(D1) → IC805 (A1) playback system is normal, the following data are displayed on page: 4, addresses: 18, 19.

Page	Address	Data
4	19	33 or B2
4	18	59 or 19

#### IC805 (A1) Playback System Check

- 9) Select page: 4, address: 11, set data: 10, and press the PAUSE button.
- 10) Select page: 4, address: 11, set data: 00, and press the PAUSE button.
- 11) Select page: 4, address: 13, set data: 04, and press the PAUSE button.  
(Data automatically returns to "00")
- 12) If IC805 (A1) playback system is normal, the following data are displayed on page: 4, addresses: 14, 15.

Page	Address	Data
4	15	7B
4	14	B5

#### IC401 (U1) Playback System Check

- 13) Select page: 4, address: 11, set data: 08, and press the PAUSE button.
- 14) Select page: 4, address: 42, set data: 01, and press the PAUSE button.
- 15) Select page: 4, address: 13, set data: 07, and press the PAUSE button.  
(Data automatically returns to "00")
- 16) Select page: 4, address: 42, set data: 00, and press the PAUSE button.
- 17) Select page: 4, address: 11, set data: 00, and press the PAUSE button.

- 18) If IC401 (U1) → IC200 (S1) playback system is normal, the following data are displayed on page: 4, addresses: 14, 15.

Page	Address	Data
4	15	1E
4	14	F2

- 19) If IC411 (D1) → IC401 (U1) playback system is normal, the following data are displayed on page: 4, addresses: 16, 17.

Page	Address	Data
4	17	D1
4	16	61

- 20) Perform "Record System Check" successively.

## 2. Record System Check

**Note:** Perform "Record System Check" successively (with BIST check tape in playback status)

- 1) Enter the following data.

**Note:** Press the PAUSE button each time the data is set.

Page	Address	Data
4	41	01
4	0F	02
4	0E	01
4	40	01
4	0F	0A
4	40	00
4	40	01
4	0F	0E
4	40	00
4	40	01
4	0F	8E
4	40	00

- 2) With the HOLD switch on adjusting remote commander turned ON, eject the BIST check tape, and insert a record tape instead.
- 3) Set the REC mode.

### IC401 (U1) Record System Check

- 4) Select page: 4, address: 11, set data: 08, and press the PAUSE button.
- 5) Select page: 4, address: 42, set data: 01, and press the PAUSE button.
- 6) Select page: 4, address: 13, set data: 07, and press the PAUSE button.  
(Data automatically returns to "00".)
- 7) Select page: 4, address: 42, set data: 00, and press the PAUSE button.
- 8) Select page: 4, address: 11, set data: 00, and press the PAUSE button.
- 9) If IC401 (U1) → IC411 (D1) record system is normal, the following data are displayed on page: 4, addresses: 16, 17.

Page	Address	Data
4	17	C5
4	16	80

### IC411 (D1) Record System Check

- 10) Select page: 3, address: 01, set data: 0D, and press the PAUSE button.
- 11) Select page: 4, address: IC, set data: FF, and press the PAUSE button.
- 12) Select page: 4, address: 11, set data: 04, , and press the PAUSE button.
- 13) Select page: 4, address: 11, set data: 00, and press the PAUSE button.
- 14) Select page: 4, address: 13, set data: 03, and press the PAUSE button.  
(Data automatically returns to "00")
- 15) If IC401 (U1) → IC411 (D1) record system is normal, the following data are displayed on page: 4, addresses: 14, 15.

Page	Address	Data
4	15	05
4	14	80

- 16) If IC411 (D1) → IC701 (IND1) record system is normal, the following data are displayed on page: 4, addresses: 16, 17.

Page	Address	Data
4	17	5E
4	16	BC

- 17) If IC805 (A1) → IC411 (D1) record system is normal, the following data are displayed on page: 4, addresses: 18, 19.

Page	Address	Data
4	19	76
4	18	B9

- 18) If IC411 (D1) → IC774 (DX) record system is normal, the following data are displayed on page: 4, addresses: 1A, 1B.

Page	Address	Data
4	1B	EF
4	1A	F7



### 3-6. AUDIO SYSTEM ADJUSTMENTS

Unless specified otherwise, set the switches as follows.

AUDIO NODE (Menu display) ..... Fs48k  
 INPUT SELECT ..... VIDEO  
 AUDIO MONITOR ..... CH-1/2  
 REC LEVEL L, R ..... Center

**Note 1:** Set AUDIO MODE at the SET UP menu of the menu screen.

#### Connection of Equipment

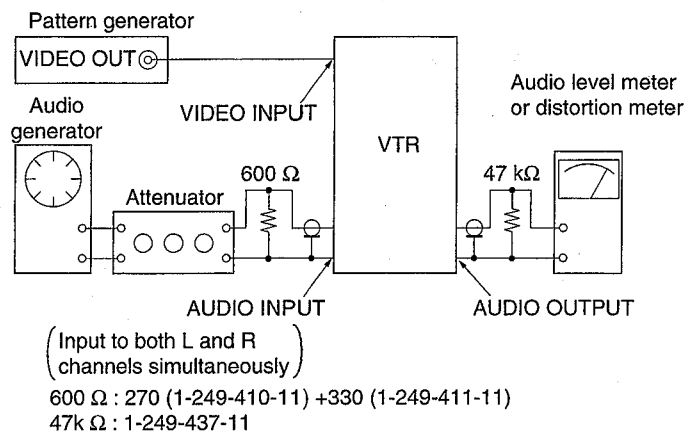


Fig. 5-3-37.

#### 1. E-E Level Check

Mode	E-E
Signal	Audio: 1 kHz -6 dBv Signal Audio input terminal (Left and Right) Video: Color bar signal Video input terminal
Measurement point	Audio output terminal (Left and Right) (Pin output, Canon output)
Measuring Instrument	Audio level meter
Specified Value	Pin output: -6 ± 3 dBv Canon output: +12 ± 3 dBv (NTSC) +10 ± 3 dBv (PAL)

#### Checking method:

- 1) Check that the 1 kHz signal level satisfies the specified value.
- 2) Check that the number in the segment of the level meter (fluorescent display tube) that is lit is 7 for both the L and R channels.

#### 2. Playback Level/Indicator Check

Mode	Playback
Signal	Audio check reference tape
Measurement point	Audio output terminal (Left and Right) (Pin output, Canon output)
Measuring Instrument	Audio level meter and frequency counter
Specified Value	32 kHz mode: 1 kHz signal should be output 48 kHz mode: 1 kHz signal level should be Pin output: +6 ± 1 dBv Canon output: 22 to 24 dBv 44.1 kHz mode EMP ON: 7.35 kHz signal level is Pin output: -6 ± 1 dBv Canon output: 10 to 12 dBv for 1 kHz signal level in 48 kHz mode 44.1 kHz mode EMP ON: 7.35 kHz signal level is Pin output: 0 ± 1 dBv Canon output: 16 to 18 dBv for 1 kHz signal level in 48 kHz mode NS AUDIO lamp should be lit

#### Checking method:

- 1) Check that the playback signal level satisfies the specified value.
- 2) Check that the NS AUDIO lamp of fluorescent display tube is on.
- 3) Confirm that the number of lighting segments of the level meter (fluorescent display tube) is 9 in 32 kHz and 48 kHz modes, or 8 to 9 in 44.1 kHz mode.

3. Recording/Playback Check (Audio Lock Mode)

Mode	Recording/Playback (LINE input)
Signal	Audio: no signal
	Video: Color bar Video input terminal
Measurement point	Display data of page: 4, addresses: 50, 58 of the adjusting remote commander
Measuring Instrument	
Specified Value	① After playback pause, the changes in the data after 5 frames have been sent continuously must be in the following order. “D4” → “D6” → “D6” → “D6” → “D6” → “D4” (NTSC) “D8” → “D8” → “D8” → “D8” → “D8” → “D8” (PAL)
	② NS AUDIO lamp should be lit.

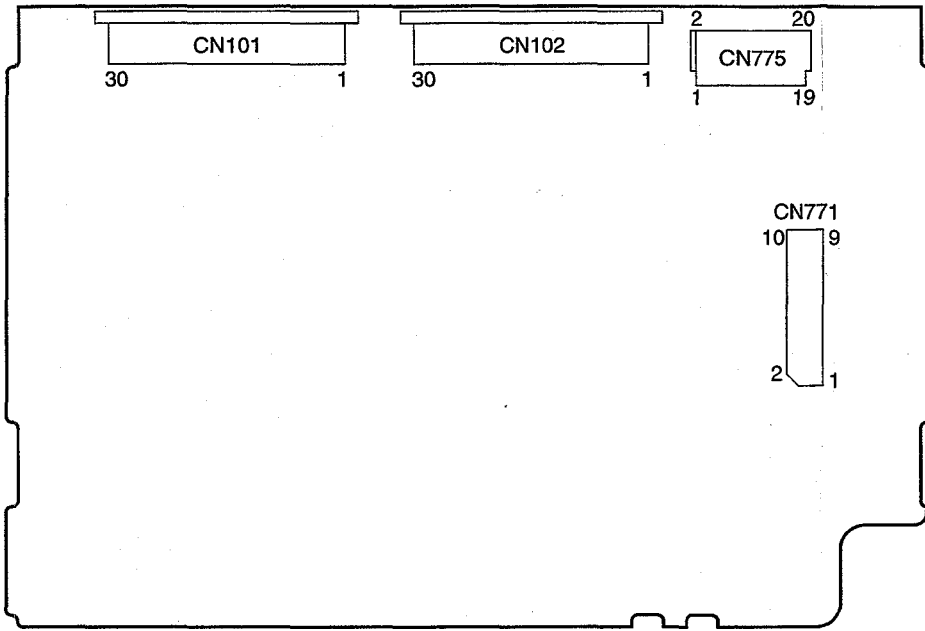
**Note 1:** Check that the AUDIO MODE (menu screen) is Fs48k.  
**Note 2:** Send the frames using front panel button.

Checking method:

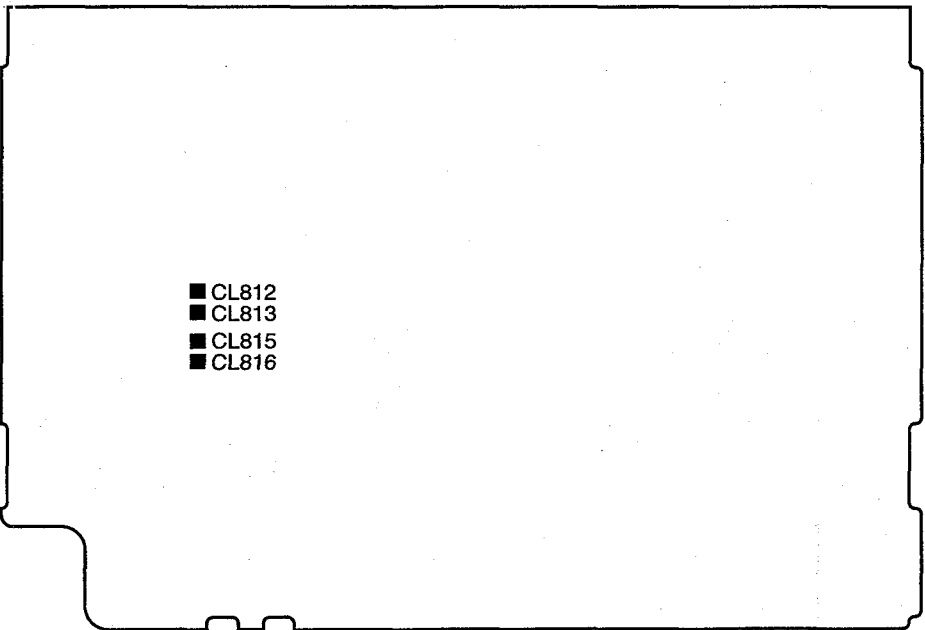
- 1) With no audio signal being input, record the color bar signal for about 1 minute.
- 2) Playback the recorded part, and set the playback pause mode.
- 3) Select page: 4, address: 50 using the adjusting remote commander.
- 4) Send the frames, so that the display data for page: 4, address: 50 is D4. (NTSC)
- 5) Send 5 frames continuously, and check that the display data of page: 4, address: 50 changes in the order specified.
- 6) Select page: 4, address: 58 using the adjusting remote commander, check that displayed data changes in specified order in the same way.
- 7) Exit the playback pause mode, playback the recorded part, and check that the NS AUDIO lamp (front panel) is off.

3-7. ARRANGEMENT DIAGRAM FOR ADJUSTMENT PARTS

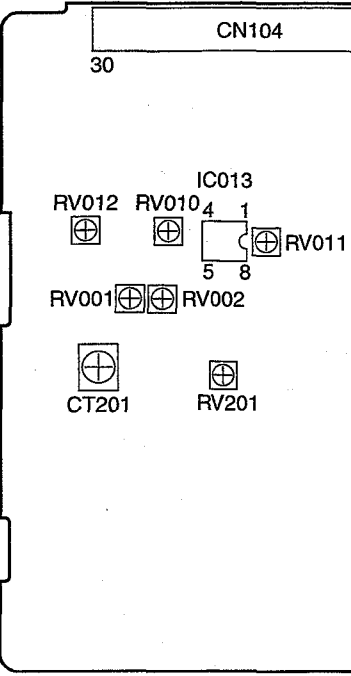
RP-228 BOARD (SIDE A)



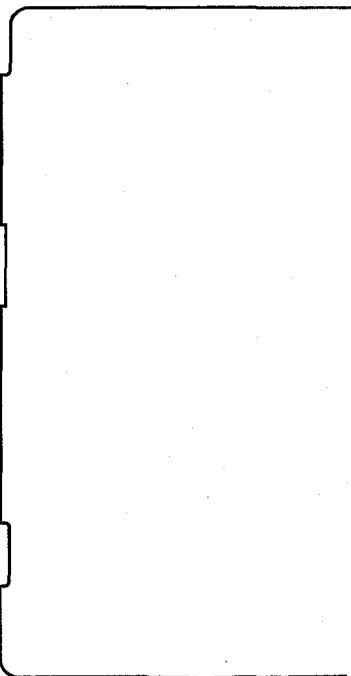
RP-228 BOARD (SIDE B)



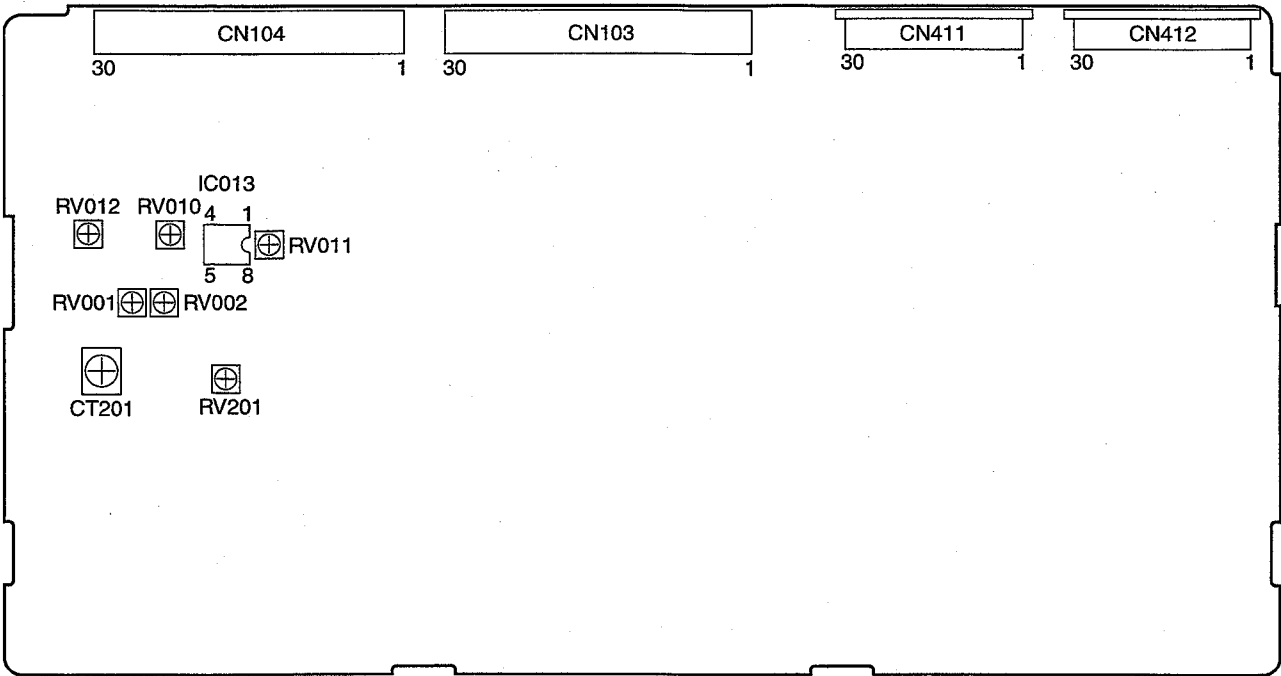
JC-19 BOARD (SIDE A)



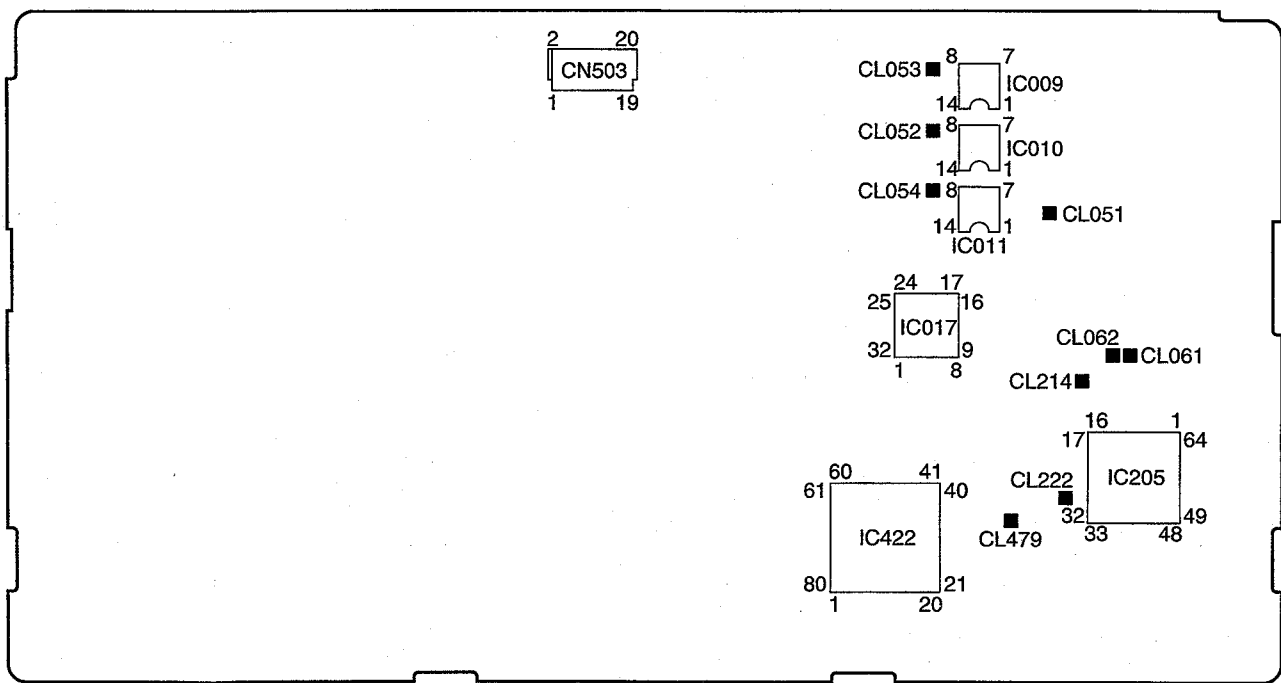
JC-19 BOARD (SIDE B)



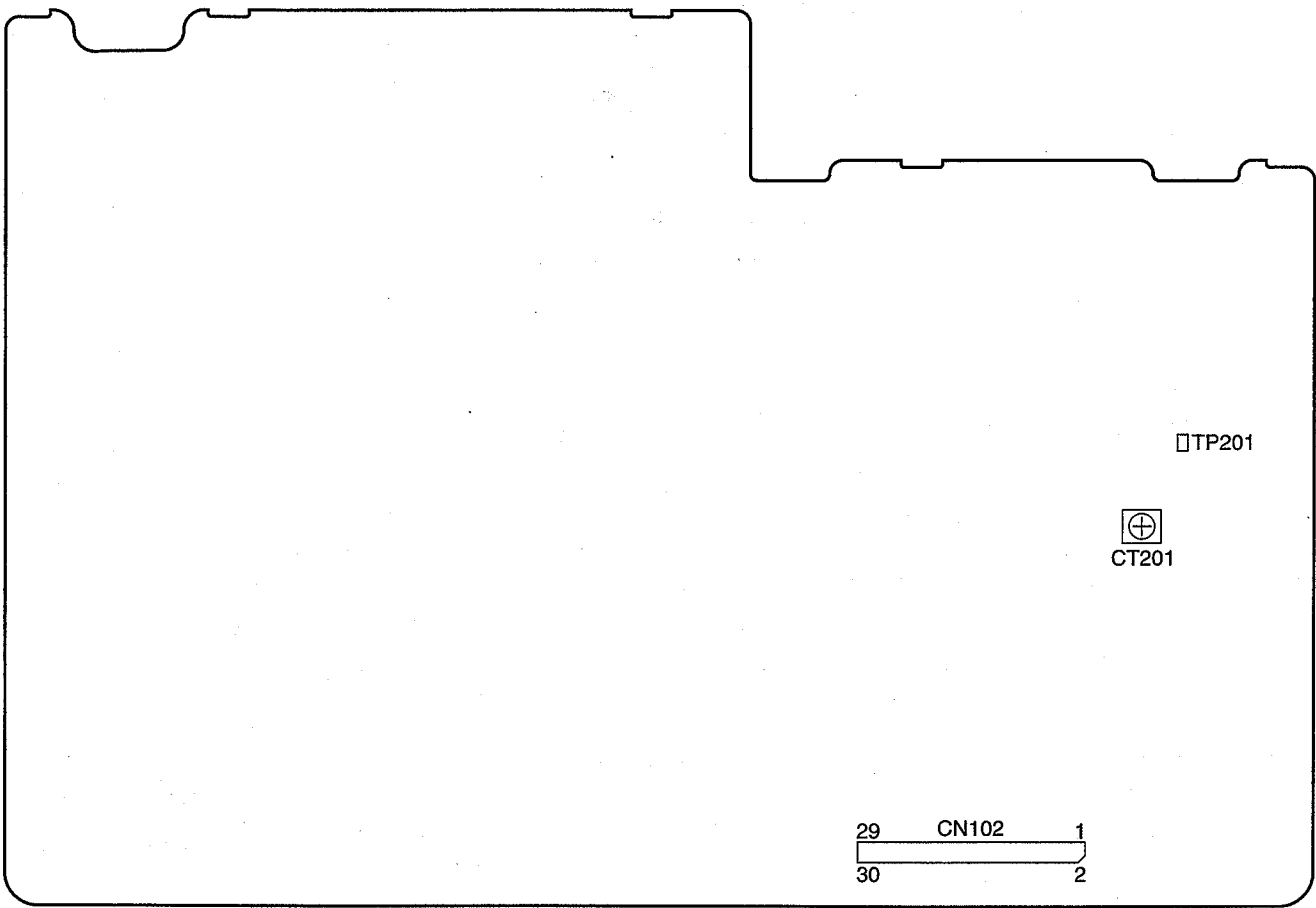
JC-19 BOARD (SIDE A)



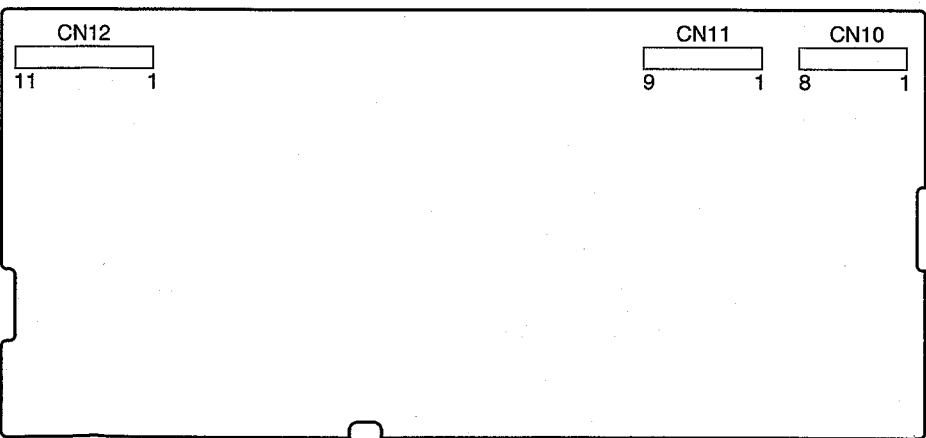
JC-19 BOARD (SIDE B)



VA-106 BOARD (SIDE A)



POWER BLOCK (U-2)



## SECTION 6 REPAIR PARTS LIST

### 6-1. EXPLODED VIEWS

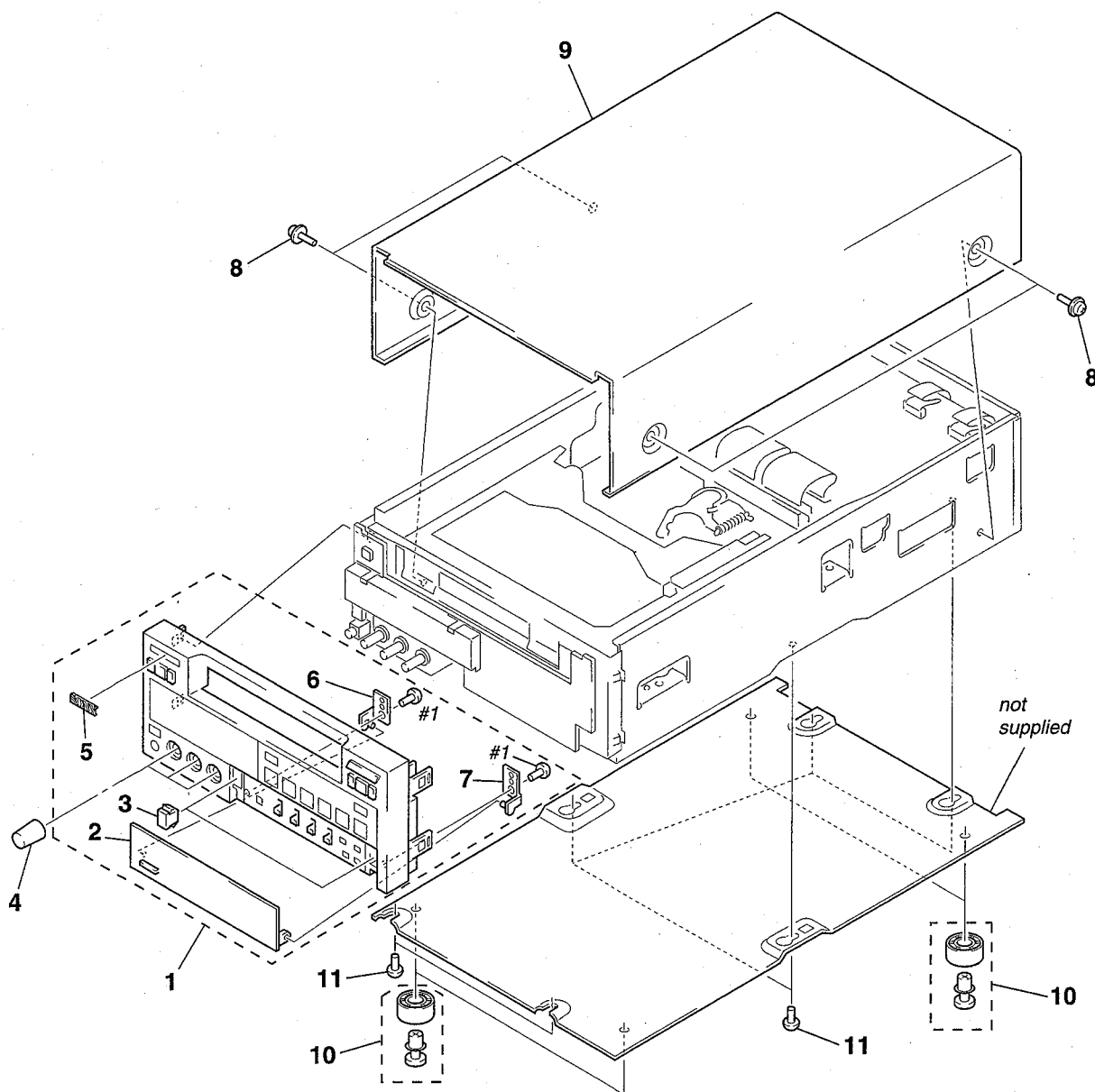
#### NOTE:

- -XX and -X mean standardized parts, so they may have some difference from the original one.
- Items marked "\*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- The mechanical parts with no reference number in the exploded views are not supplied.
- Hardware (# mark) list and accessories are given in the last of the electrical parts list.

The components identified by mark  $\Delta$  or dotted line with mark  $\Delta$  are critical for safety. Replace only with part number specified.

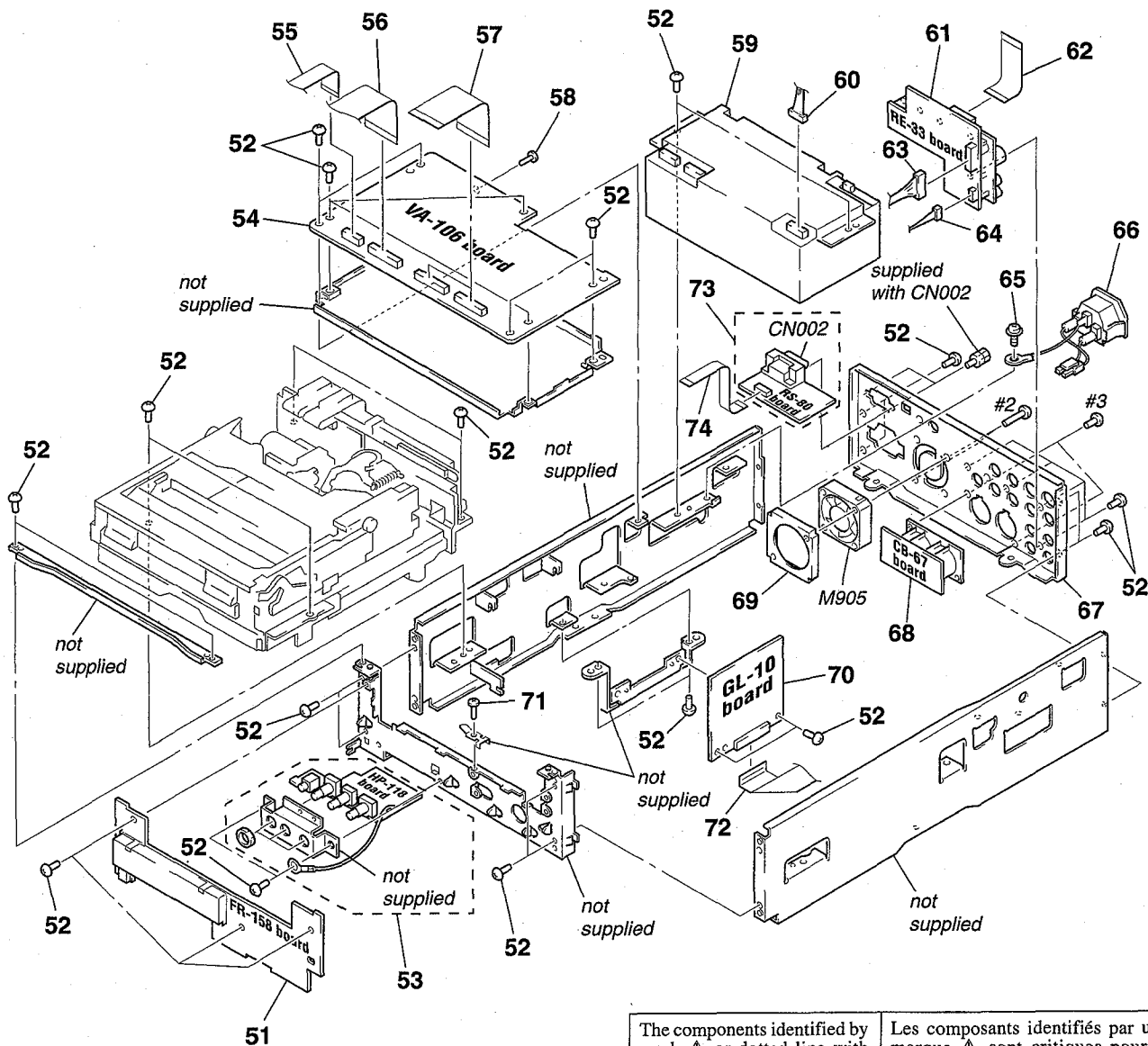
Les composants identifiés par une marque  $\Delta$  sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

#### 6-1-1. OVERALL ASSEMBLY



Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
1	X-3949-148-1	PANEL ASSY, FRONT (DSR-40)		* 6	X-3948-057-1	HINGE (L) ASSY, DOOR	
1	X-3949-151-1	PANEL ASSY (P), FRONT (DSR-40P)		* 7	X-3948-056-1	HINGE (R) ASSY, DOOR	
2	X-3949-149-1	DOOR ASSY (DSR-40)		8	4-886-821-01	SCREW, M3 CASE	
2	X-3949-152-1	DOOR ASSY (P) (DSR-40P)		* 9	3-987-158-01	CASE, UPPER	
3	3-950-280-01	MAGNET		10	3-987-171-01	FOOT (FF-004)	
4	3-956-976-01	KNOB, ROTARY		11	3-970-608-41	SUMITITE (B3), +BV	
5	4-942-567-01	EMBLEM (NO.4), SONY					

## 6-1-2. CHASSIS ASSEMBLY

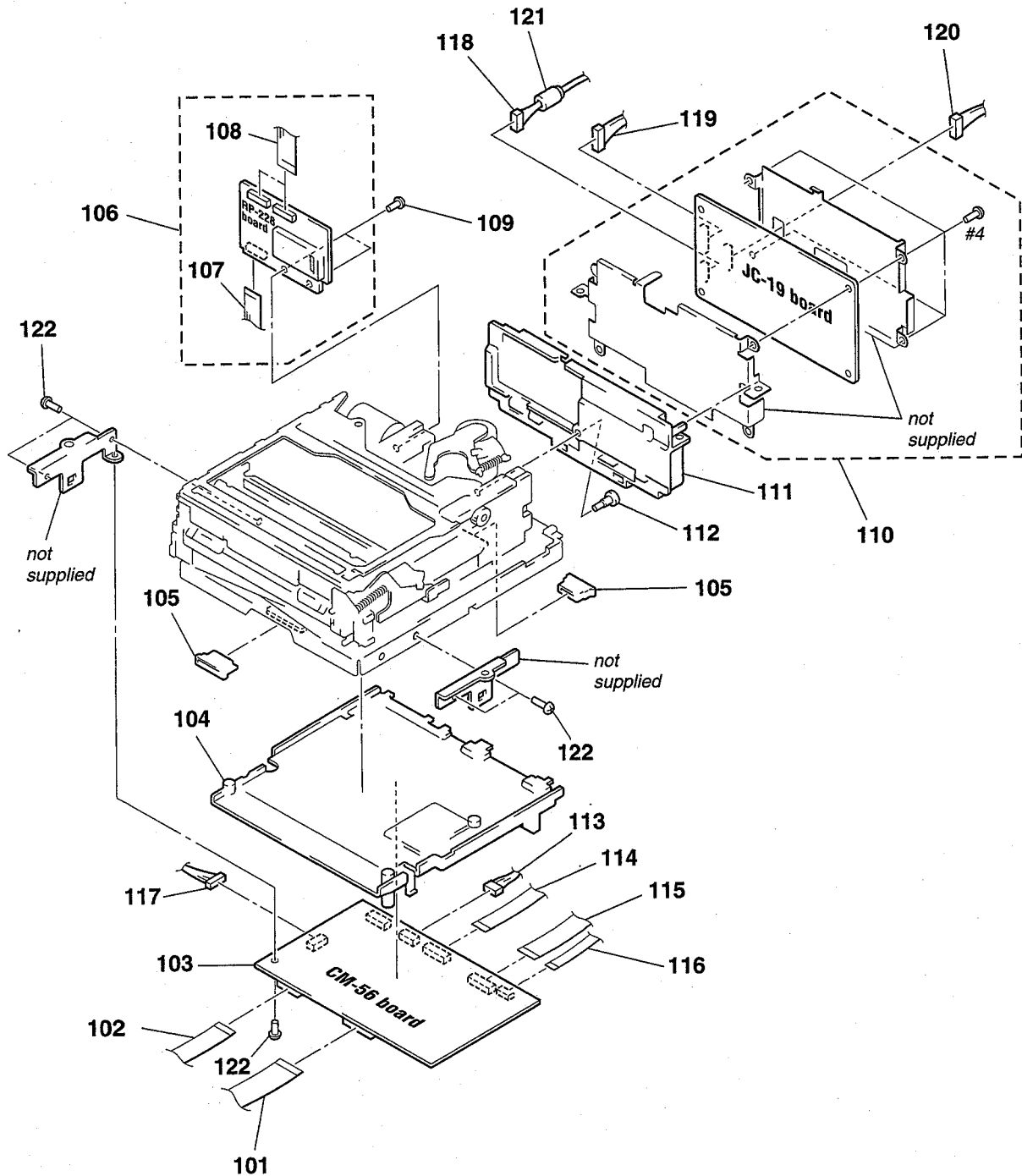


The components identified by mark  $\Delta$  or dotted line with mark  $\Delta$  are critical for safety. Replace only with part number specified.

Les composants identifiés par une marque  $\Delta$  sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
* 51	A-7073-774-A	FR-158 BOARD, COMPLETE		64	1-959-586-11	HARNESS (CR-111)	
52	3-970-608-41	SUMITITE (B3), +BV		65	3-975-291-01	SCREW (4X6)	
* 53	A-7073-776-A	HP-118 BOARD, COMPLETE (DSR-40)		$\Delta$ 66	1-958-585-11	HARNESS (AC-227)	
* 53	A-7073-779-A	HP-118 BOARD, COMPLETE (DSR-40P)		* 67	3-053-185-12	PANEL, REAR (DSR-40)	
* 54	A-7067-206-A	VA-106 BOARD, COMPLETE (DSR-40)		* 67	3-053-185-22	PANEL, REAR (DSR-40P)	
* 54	A-7067-208-A	VA-106 BOARD, COMPLETE (DSR-40P)		* 68	A-7073-780-A	CB-67 BOARD, COMPLETE	
55	1-790-556-11	CABLE, FLAT (FVH-5)		69	3-945-562-01	BRACKET, FAN	
56	1-782-825-11	CABLE, FLAT (FVF-8)		* 70	A-7067-205-A	GL-10 BOARD, COMPLETE (DSR-40)	
57	1-782-824-11	CABLE, FLAT (FVJ-7)		* 70	A-7067-207-A	GL-10 BOARD, COMPLETE (DSR-40P)	
58	3-728-266-01	COVER, 2.5 JACK		71	3-964-010-01	SCREW M2	
$\Delta$ 59	1-468-377-11	POWER BLOCK (U-1/U-2) (DSR-40)		72	1-790-725-11	CABLE, FLAT (FVG-1)	
$\Delta$ 59	1-468-378-11	POWER BLOCK (U-1/U-2) (DSR-40P)		* 73	A-7073-778-A	RS-80 BOARD, COMPLETE (DSR-40)	
60	1-959-583-11	HARNESS (VP-73)		* 73	A-7073-781-A	RS-80 BOARD, COMPLETE (DSR-40P)	
* 61	A-7073-775-A	RE-33 BOARD, COMPLETE		74	1-782-822-11	CABLE, FLAT (FVR-9)	
62	1-790-557-11	CABLE, FLAT (FVR-12)		CN002	1-573-005-21	CONNECTOR, D-SUB 9P	
63	1-959-585-11	HARNESS (HR-62)					

### 6-1-3. MD BLOCK ASSEMBLY



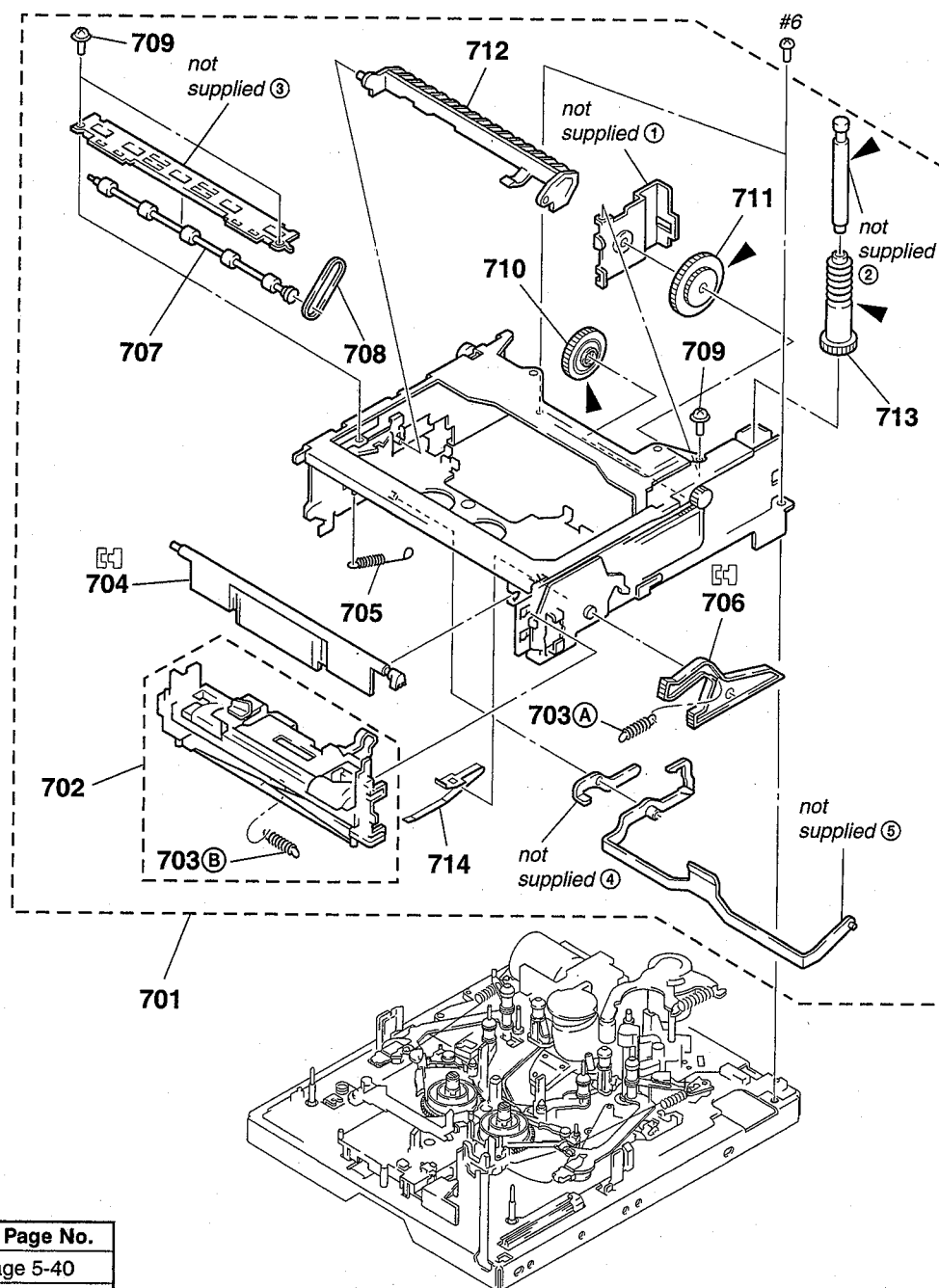
Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
101	1-776-148-11	CABLE, FLAT (FCM-11) 15P		* 111	3-987-133-01	SUPPORT, JC	
102	1-776-145-11	CABLE, FLAT (FCM-8) 16P		112	3-741-948-01	SCREW (3), SPECIAL (+) TAPPING	
* 103	A-7067-127-A	CM-56 BOARD, COMPLETE (DSR-40P)		113	1-958-288-11	HARNESS (CM-130)	
* 103	A-7067-131-A	CM-56 BOARD, COMPLETE (DSR-40)		114	1-776-151-11	CABLE, FLAT (FCM-12) 14P	
* 104	3-987-138-01	FRAME, MD		115	1-776-147-11	CABLE, FLAT (FCM-10) 15P	
105	1-764-137-11	CONNECTOR, TRANSLATION 15P		116	1-776-146-11	CABLE, FLAT (FCM-9) 9P	
* 106	A-7067-128-A	RP-228 BOARD, COMPLETE (DSR-40P)		117	1-958-057-11	HARNESS (CP-79)	
* 106	A-7067-132-A	RP-228 BOARD, COMPLETE (DSR-40)		118	1-958-061-11	HARNESS (VJ-103)	
107	1-776-149-11	CABLE, FLEXIBLE FLAT 30P		119	1-958-058-11	HARNESS (JP-55)	
108	1-783-376-11	CABLE, FLEXIBLE FLAT (FFC-245)		120	1-959-584-11	HARNESS (JH-51)	
109	3-732-817-01	SCREW (2X4.5), TAPPING		121	1-543-793-11	FILTER, CLAMP (FERRITE CORE)	
* 110	A-7067-126-A	JC-19 BOARD, COMPLETE (DSR-40P)		122	3-970-608-41	SUMITITE (B3), +BV	
* 110	A-7067-130-A	JC-19 BOARD, COMPLETE (DSR-40)					

## 6-1-4. FL CASSETTE COMPARTMENT ASSEMBLY

### NOTE FOR INSTALLATION

► : Place for grease (SG-055G: 7-651-000-09)

⌘ : Take note of the position and specified direction.



not supplied	Ref. Page No.
①	Page 5-40
②	Page 5-40
③	Page 5-38
④	Page 5-41
⑤	Page 5-41

Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
701	A-7092-644-A	FL BLOCK ASSY	(5-2)	708	3-967-816-01	BELT, ROLLER	(5-38)
702	A-7092-647-A	SLOAT BLOCK ASSY, C	(5-41)	709	3-947-503-01	SCREW (M1.4X2.5)	(5-40)
703	3-967-604-01	SPRING (DB), TENSION	(A: 5-40/B: 5-41)	710	3-967-591-01	GEAR (B)	(5-40)
704	3-967-655-01	DOOR, C	(5-40)	711	3-967-590-01	GEAR (A)	(5-40)
705	3-967-613-01	SPRING (HS), TENSION COIL	(5-41)	712	3-967-653-01	OPENER, LID	(5-39)
706	3-967-777-01	ARM, DAMPER	(5-40)	713	3-967-592-01	WORM, C	(5-40)
707	X-3945-780-1	SHAFT ASSY, ROLLER	(5-38)	714	3-967-636-01	SPRING, SHIFT PLATE	(5-41)

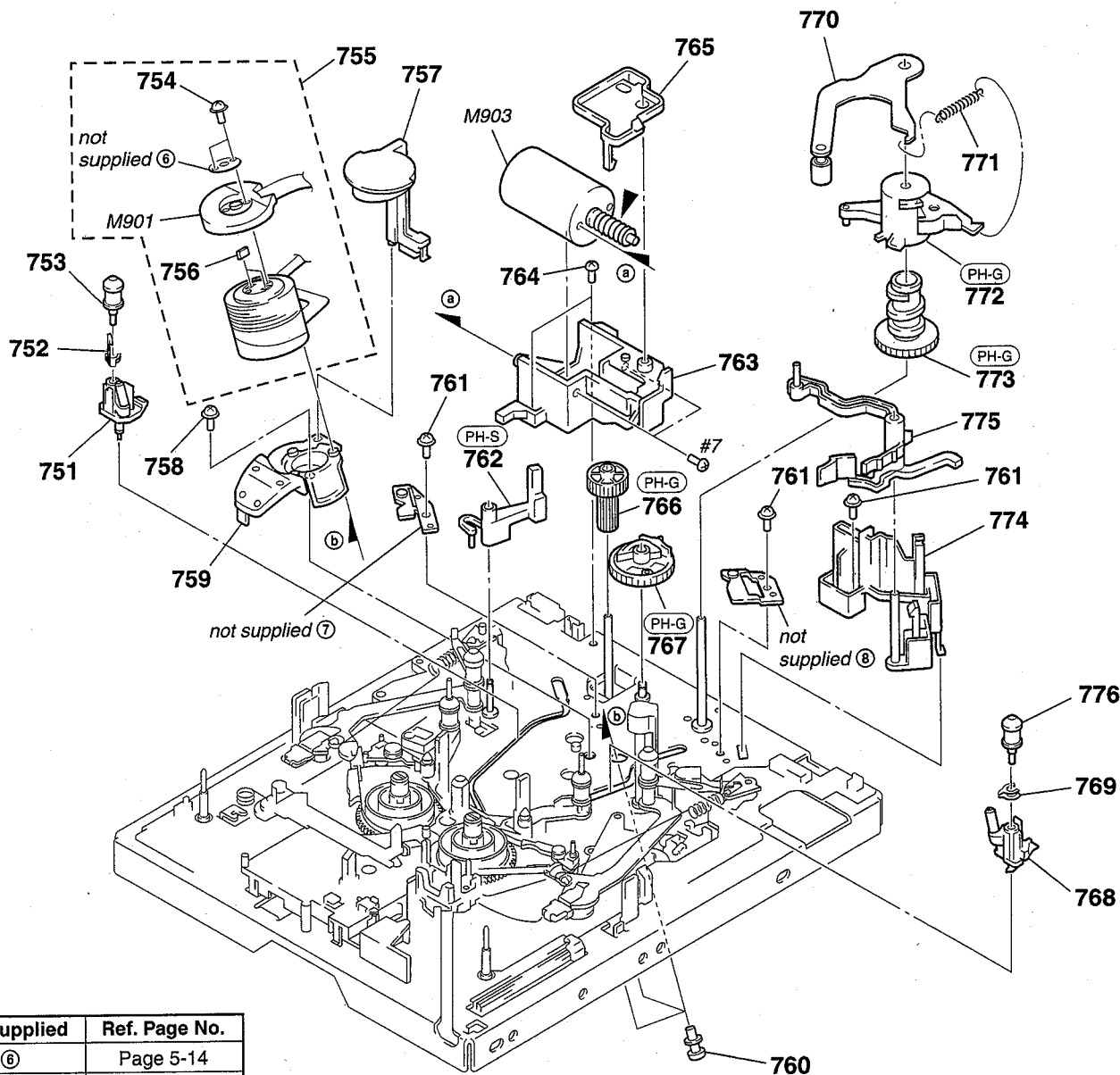


# 6-1-5. MECHANISM CHASSIS ASSEMBLY (1) (TOP SIDE VIEW (1))

## NOTE FOR INSTALLATION

PH- : Phase adjustment

► : Place for grease (SG-055G: 7-651-000-09)



not supplied	Ref. Page No.
⑥	Page 5-14
⑦	Page 5-15
⑧	Page 5-16

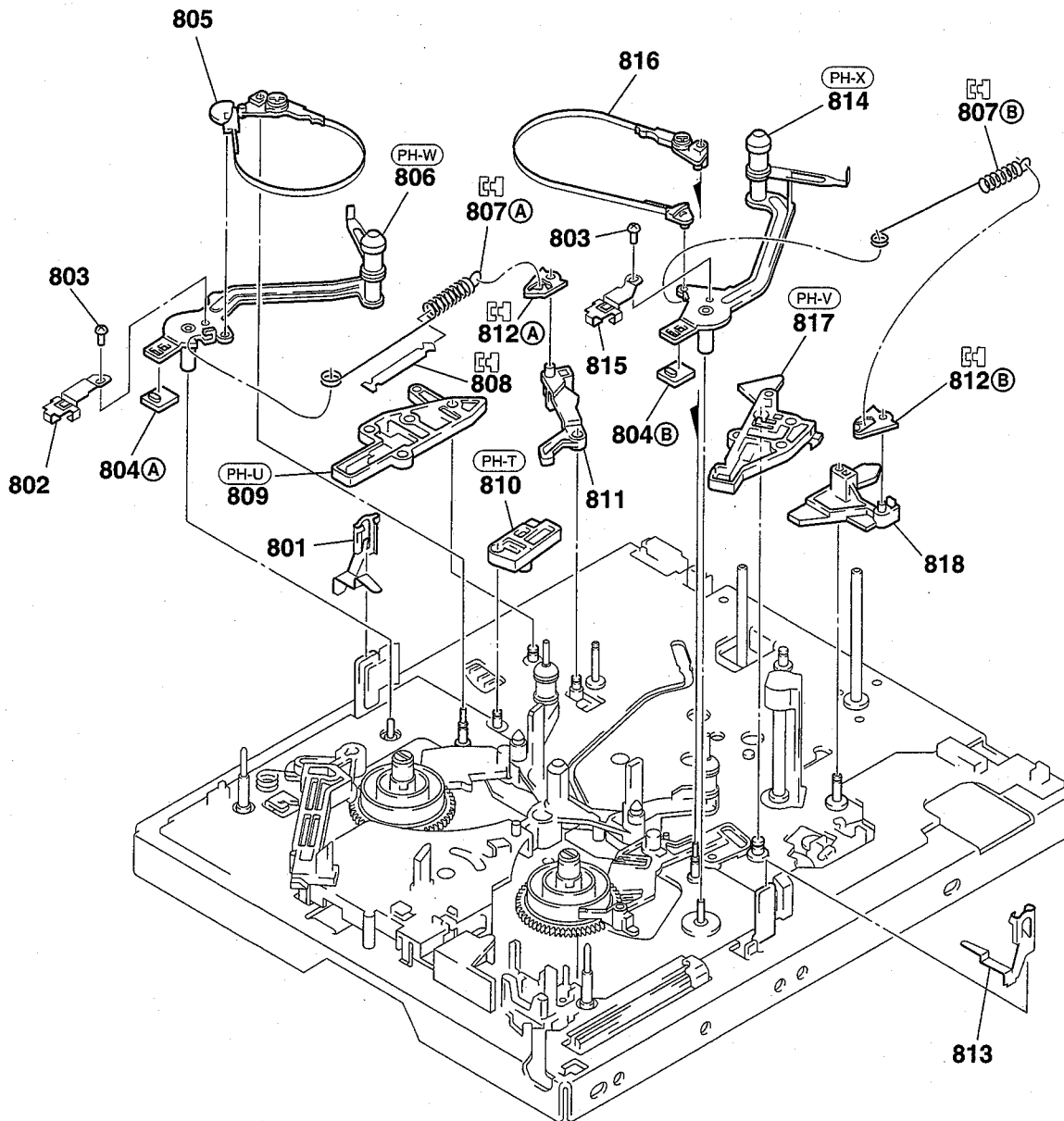
Ref. No.	Part No.	Description	Ref. page No.	Ref. No.	Part No.	Description	Ref. page No.
751	X-3945-801-1	BASE ASSY, TG3/4	(5-31)	765	3-967-751-01	COVER, LM	(5-15)
752	3-967-740-01	SPRING, TG3 LOCK	(5-26, 5-33)	766	3-967-767-01	WHEEL, LM WORM	(5-15)
753	X-3947-441-1	ROLLER ASSY, TG3	(5-26)	767	3-967-768-01	GEAR, PINCH DRIVING	(5-15)
754	3-703-816-74	SCREW (M1.4X4.5), SPECIAL HEAD		768	X-3945-803-1	BASE ASSY, TG5/6	(5-33)
755	A-7044-015-A	DRUM ASSY (DEH-08B-R)	(5-14)	769	3-967-741-01	SPRING, TG6 LOCK	(5-26, 5-33)
756	1-770-363-11	ELASTIC CONNECTOR	(5-14)	770	X-3945-810-1	ARM ASSY, PINCH	(5-16)
757	3-967-785-01	STOPPER, TAPE	(5-14)	771	3-967-645-01	SPRING (PINCH), TENSION COIL	(5-16)
758	3-967-728-01	SCREW (M2 X 5)		772	3-967-676-01	LIMITER, PINCH	(5-16)
759	3-967-817-01	BASE, DRUM	(5-14)	773	3-967-769-01	GEAR, PINCH CAM	(5-16)
760	A-7040-449-A	SCREW ASSY	(5-14)	774	3-967-679-01	RETAINER, PINCH	(5-16)
761	3-954-285-01	SCREW (M1.4X0.2)		775	3-967-795-03	ARM, HC	(5-16)
762	X-3945-798-1	ARM ASSY, TC	(5-15)	776	X-3945-802-1	ROLLER ASSY, TG6	(5-26)
763	3-967-675-01	HOLDER, LM	(5-15)	M901	X-3944-897-2	FPC ASSY, MOTOR	(5-14)
764	3-732-817-01	SCREW (2X4.5), TAPPING		M903	X-3945-784-1	MOTOR ASSY, LM (LOADING)	(5-15)

**6-1-6. MECHANISM CHASSIS ASSEMBLY (2)**  
**(TOP SIDE VIEW (2))**

**NOTE FOR INSTALLATION**

**PH-** : Phase adjustment

**⌏** : Take note of the position and specified direction.

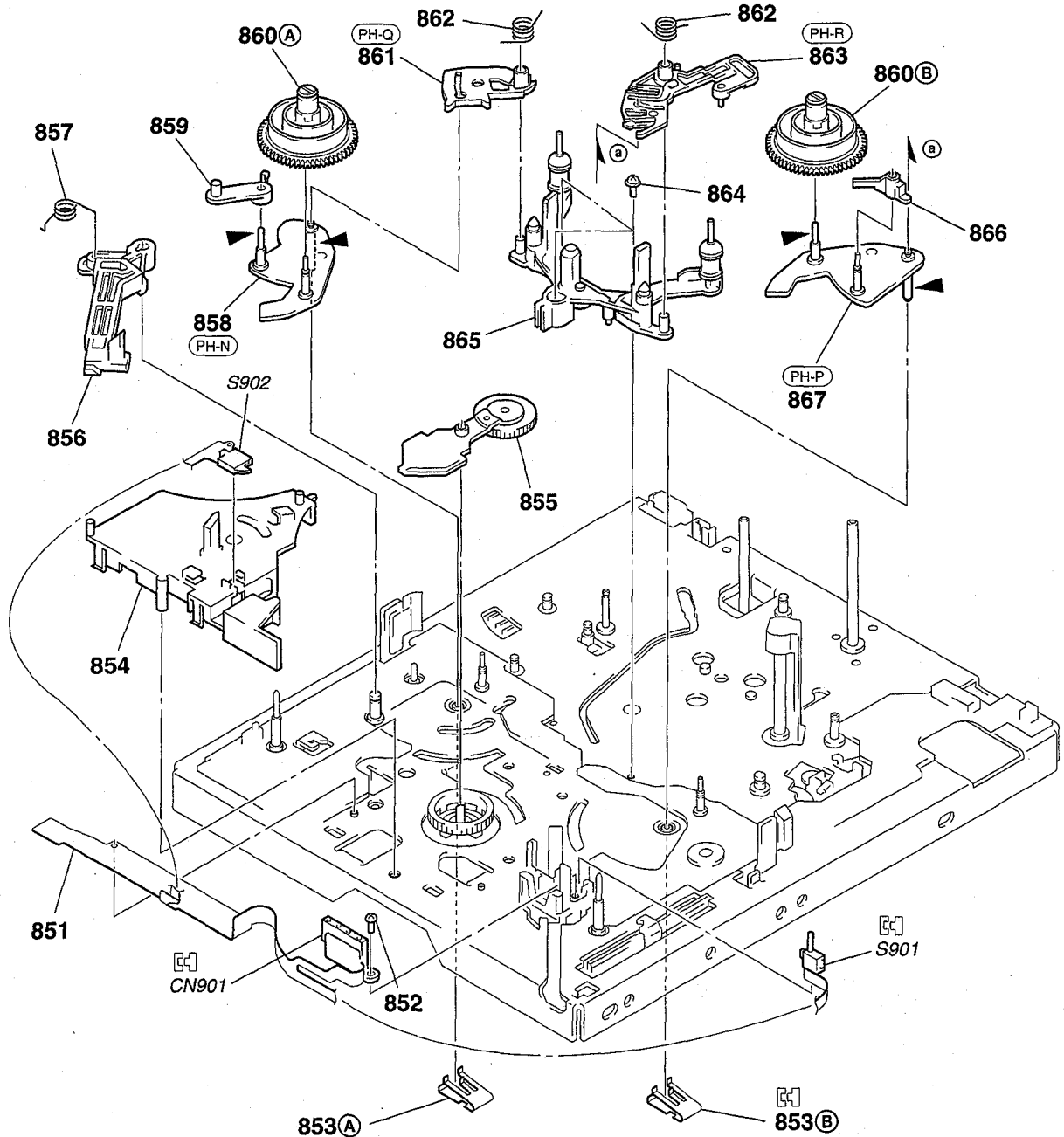


Ref. No.	Part No.	Description	Ref. page No.	Ref. No.	Part No.	Description	Ref. page No.
801	3-967-809-01	RETAINER, TG2	(5-19)	810	3-967-764-01	ARM, TG2 SELECTION	(5-18)
802	3-967-715-01	SPRING, TG2 PLATE	(5-19)	811	3-967-807-01	HOOK, TG2 SPRING	(5-18)
803	3-728-148-11	SCREW (M1.4X2.5), SPECIAL HEAD		812	3-967-724-01	ADJUSTOR, SPRING	(5-18, Ⓐ: 5-9/Ⓑ: 5-10)
804	3-967-714-01	MAGNET, ET	(Ⓐ: 5-19/Ⓑ: 5-520)	813	3-967-810-01	RETAINER, TG7	(5-20)
805	X-3945-792-1	BAND ASSY, S TENSION REGULATOR	(5-19)	814	X-3945-806-1	ARM ASSY, TG7	(5-20)
806	X-3945-805-1	ARM ASSY, TG2	(5-19)	815	3-967-694-01	SPRING, TG7 PLATE	(5-20)
807	3-967-726-01	SPRING (TG2), TENSION COIL	(5-18, Ⓐ: 5-9/Ⓑ: 5-10)	816	X-3945-793-1	BAND ASSY, T TENSION REGULATOR	(5-20)
808	3-967-685-01	SHEET, DAMPER	(5-18)	817	X-3945-783-1	ARM ASSY, TG7 LOAD	(5-20)
809	X-3945-782-1	ARM ASSY, TG2 LOAD	(5-19)	818	3-967-808-01	HOOK, TG7 SPRING	(5-18)

# 6-1-7. MECHANISM CHASSIS ASSEMBLY (3) (TOP SIDE VIEW (3))

## NOTE FOR INSTALLATION

- PH- : Phase adjustment
- : Place for grease (SG-055G: 7-651-000-09)
- ⌈ : Take note of the position and specified direction.



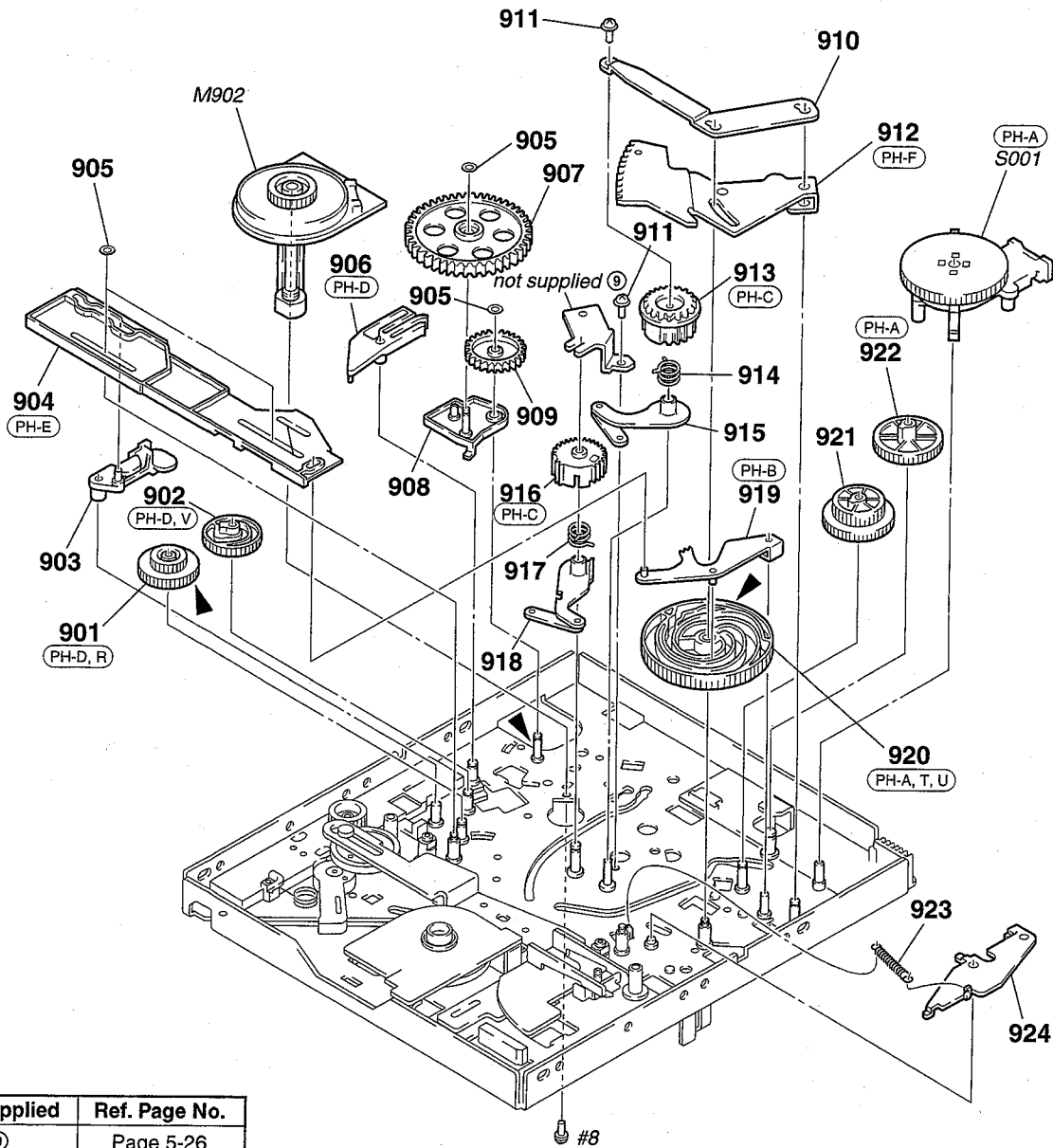
Ref. No.	Part No.	Description	Ref. page No.	Ref. No.	Part No.	Description	Ref. page No.
851	1-658-990-11	FP-406 FLEXIBLE BOARD		861	3-967-776-01	BRAKE, S	(5-25)
852	3-318-201-11	SCREW (B) (1.4X3), TAPPING		862	3-967-673-01	SPRING, S BRAKE	(5-25)
853	3-967-684-01	SPRING, PLATE (A: 5-23/B: 5-24)		863	3-967-775-01	RATCHET, T	(5-25)
854	3-967-692-01	GUARD, GOOSENECK	(5-17)	864	3-947-503-01	SCREW (M1.4X2.5)	
855	X-3945-807-1	ARM ASSY, GOOSENECK	(5-17)	865	X-3945-804-1	BASE ASSY, TG18	(5-25)
856	3-967-784-01	ARM, RL	(5-17)	866	3-967-725-01	HOLDER, T REEL	(5-22)
857	3-967-683-01	SPRING, RL PRESS	(5-17)	867	X-3945-815-1	PLATE ASSY, T REEL	(5-24)
858	X-3945-814-1	PLATE ASSY, S REEL	(5-23)	CN901	1-770-312-21	CONNECTOR 4P	(5-35)
859	3-967-680-01	LINK, RL	(5-17)	S901	1-762-551-11	SWITCH, PUSH (REC PROOF)	(5-35)
860	A-7040-441-A	TABLE BLOCK ASSY, REEL (A: 5-21/B: 5-22)		S902	1-572-288-11	SWITCH, PUSH (C IN SW)	(5-17)

**6-1-8. MECHANISM CHASSIS ASSEMBLY (4)  
(BOTTOM SIDE VIEW (1))**

**NOTE FOR INSTALLATION**

PH- : Phase adjustment

► : Place for grease (SG-055G: 7-651-000-09)

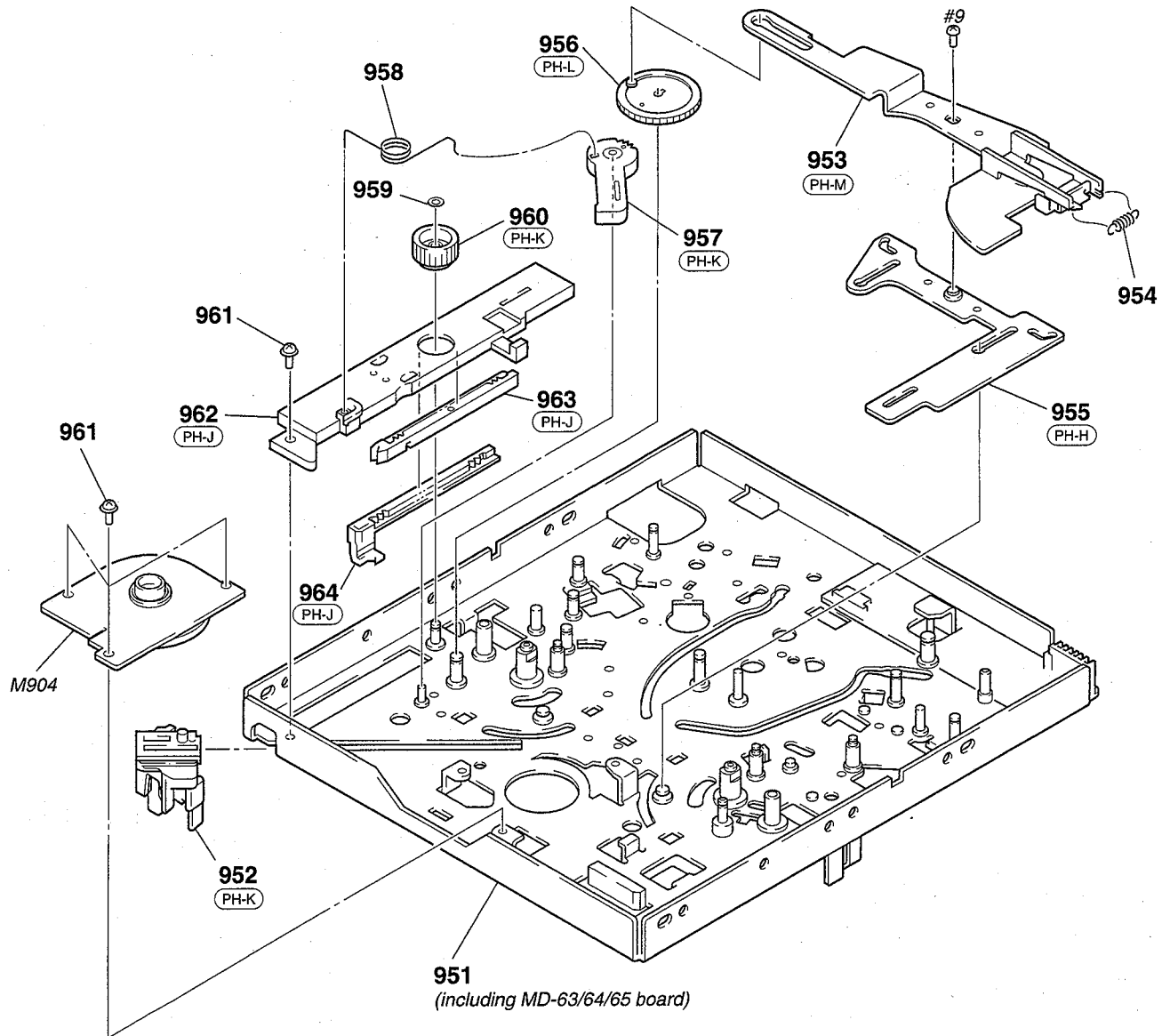


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⑨	Page 5-26

Ref. No.	Part No.	Description	Ref. page No.	Ref. No.	Part No.	Description	Ref. page No.
901	3-967-678-01	GEAR, T CAM	(5-28)	914	3-967-746-01	SPRING, TG3/4 LIMITER	(5-31)
902	3-967-756-01	GEAR, TG7 CAM	(5-28)	915	X-3945-794-1	ARM ASSY, TG3/4	(5-31)
903	3-967-763-01	ARM, TG7 SELECTION	(5-28)	916	3-967-792-01	GEAR, TG5/6	(5-33)
904	3-967-677-01	SLIDER, M	(5-28)	917	3-967-748-01	SPRING, TG5/6 LIMITER	(5-33)
905	3-669-465-01	WASHER (1.5), STOPPER	(5-28)	918	X-3945-795-1	ARM ASSY, TG5/6	(5-33)
906	3-967-829-01	ARM, FL SELECTION	(5-28)	919	3-967-753-01	ARM, M SLIDER	(5-28)
907	3-967-828-01	GEAR, FL JOINT	(5-26)	920	3-967-819-01	CAM, MAIN	(5-29)
908	X-3945-813-1	ARM ASSY, FL JOINT	(5-27)	921	3-967-765-01	GEAR, TC	(5-27)
909	3-967-830-01	GEAR, FL RELAY	(5-27)	922	3-967-766-01	GEAR, RELAY	(5-27)
910	3-967-755-01	RETAINER, GL ARM	(5-28)	923	3-967-633-01	SPRING (TG2SL), TENSION COIL	(5-29)
911	3-947-503-01	SCREW (M1.4X2.5)	(5-28)	924	X-3945-781-1	ARM ASSY, TG2 SL	(5-29)
912	3-967-754-01	ARM, GL	(5-28)	M902	8-835-545-01	MOTOR, DC SCD11A/J-N (CAPSTAN)	(5-26)
913	3-967-790-01	GEAR, TG3/4	(5-31)	S001	1-762-550-11	SWITCH, ROTARY (MODE)	(5-27)

**6-1-9. MECHANISM CHASSIS ASSEMBLY (5)  
(BOTTOM SIDE VIEW (2))**

**NOTE FOR INSTALLATION**  
(PH- ): Phase adjustment



Ref. No.	Part No.	Description	Ref. page No.	Ref. No.	Part No.	Description	Ref. page No.
* 951	A-7040-431-A	CHASSIS BLOCK ASSY, MECHANICAL (including MD-63/64/65 board)	(5-35)	958	3-967-682-01	SPRING, MIC PRESS	(5-34)
952	3-967-690-01	HOLDER, MIC	(5-35)	959	3-669-465-01	WASHER (1.5), STOPPER	(5-35)
953	X-3945-789-1	ARM ASSY, RS	(5-34)	960	3-967-681-01	GEAR, RACK JOINT	(5-35)
954	3-967-667-01	TENSION COIL SPRING	(5-34)	961	3-947-503-01	SCREW (M1.4X2.5)	(5-35)
955	X-3945-788-1	LINK ASSY, PLATE	(5-37)	962	3-967-689-01	HOLDER, RACK	(5-35)
956	X-3945-787-1	GEAR ASSY, RS	(5-34)	963	3-967-771-01	RACK (SC)	(5-35)
957	3-967-783-01	LEVER, MIC	(5-34)	964	3-967-770-01	RACK (LC)	(5-35)
				M904	8-835-537-01	MOTOR, DC SRD11A/J-N (REEL)	(5-34)

## 6-2. ELECTRICAL PARTS LIST

## NOTE:

- Due to standardization, replacements in the parts list may be different from the parts specified in the diagrams or the components used on the set.
- Items marked "\*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- RESISTORS**  
All resistors are in ohms.  
METAL: Metal-film resistor.  
METAL OXIDE: Metal oxide-film resistor.  
F: nonflammable

## • SEMICONDUCTORS

In each case, u:  $\mu$ , for example:

uA. . :  $\mu$ A. .    uPA. . :  $\mu$ PA. .  
 uPB. . :  $\mu$ PB. .    uPC. . :  $\mu$ PC. .  
 uPD. . :  $\mu$ PD. .

## • CAPACITORS

uF:  $\mu$ F

## • COILS

uH:  $\mu$ H

The components identified by mark  $\Delta$  or dotted line with mark  $\Delta$  are critical for safety. Replace only with part number specified.

Les composants identifiés par une marque  $\Delta$  sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

When indicating parts by reference number, please include the board.

Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
*	A-7073-780-A	CB-67 BOARD, COMPLETE ***** (Ref.No. 6,000 Series)		C035	1-163-021-91	CERAMIC CHIP 0.01uF 10%	50V
		< CONNECTOR >		C036	1-165-319-11	CERAMIC CHIP 0.1uF	50V
* CN101	1-564-005-11	PIN, CONNECTOR 6P		C038	1-163-031-11	CERAMIC CHIP 0.01uF	50V
CN102	1-750-785-11	CONNECTOR (XLR TYPE) 3P (AUDIO OUTPUT)		C039	1-124-778-00	ELECT CHIP 22uF 20%	6.3V
		< JUMPER RESISTOR >		C040	1-164-004-11	CERAMIC CHIP 0.1uF 10%	25V
JS001	1-216-295-91	SHORT 0		C041	1-163-035-00	CERAMIC CHIP 0.047uF	50V
JS004	1-216-295-91	SHORT 0		C042	1-163-257-11	CERAMIC CHIP 180PF 5%	50V
JS006	1-216-295-91	SHORT 0		C046	1-165-319-11	CERAMIC CHIP 0.1uF	50V
JS009	1-216-295-91	SHORT 0		C047	1-164-004-11	CERAMIC CHIP 0.1uF 10%	25V
				C048	1-164-004-11	CERAMIC CHIP 0.1uF 10%	25V
				C049	1-164-004-11	CERAMIC CHIP 0.1uF 10%	25V
				C051	1-165-319-11	CERAMIC CHIP 0.1uF	50V
				C052	1-126-193-11	ELECT 1uF 20%	50V
				C053	1-126-397-11	ELECT 33uF 20%	25V
				C054	1-127-530-11	ELECT 22uF 20%	20V
				C055	1-163-017-00	CERAMIC CHIP 0.0047uF 5%	50V
				C056	1-164-004-11	CERAMIC CHIP 0.1uF 10%	25V
				C058	1-127-530-11	ELECT 22uF 20%	20V
				C063	1-164-336-11	CERAMIC CHIP 0.33uF	25V
				C066	1-163-235-11	CERAMIC CHIP 22PF 5%	50V
				C067	1-163-235-11	CERAMIC CHIP 22PF 5%	50V
				C068	1-163-031-11	CERAMIC CHIP 0.01uF	50V
				C073	1-163-019-00	CERAMIC CHIP 0.0068uF 10%	50V
				C075	1-163-235-11	CERAMIC CHIP 22PF 5%	50V
				C076	1-163-235-11	CERAMIC CHIP 22PF 5%	50V
				C078	1-124-779-00	ELECT CHIP 10uF 20%	16V
				C079	1-163-009-11	CERAMIC CHIP 0.001uF 10%	50V
				C080	1-164-004-11	CERAMIC CHIP 0.1uF 10%	25V
				C081	1-165-319-11	CERAMIC CHIP 0.1uF	50V
				C082	1-163-031-11	CERAMIC CHIP 0.01uF	50V
				C083	1-127-530-11	ELECT 22uF 20%	20V
				C086	1-163-031-11	CERAMIC CHIP 0.01uF	50V
				C087	1-127-530-11	ELECT 22uF 20%	20V
				C088	1-126-193-11	ELECT 1uF 20%	50V
				C090	1-107-823-11	CERAMIC CHIP 0.47uF 10%	16V
				C091	1-163-031-11	CERAMIC CHIP 0.01uF	50V
				C092	1-126-205-11	ELECT CHIP 47uF 20%	6.3V
				C093	1-164-004-11	CERAMIC CHIP 0.1uF 10%	25V
				C094	1-164-004-11	CERAMIC CHIP 0.1uF 10%	25V
				C095	1-163-031-11	CERAMIC CHIP 0.01uF	50V
				C096	1-164-004-11	CERAMIC CHIP 0.1uF 10%	25V
				C099	1-163-019-00	CERAMIC CHIP 0.0068uF 10%	50V
C001	1-163-121-00	CERAMIC CHIP 150PF 5%	50V				
C004	1-163-121-00	CERAMIC CHIP 150PF 5%	50V				
C005	1-163-021-91	CERAMIC CHIP 0.01uF 10%	50V				
C006	1-124-779-00	ELECT CHIP 10uF 20%	16V				
C007	1-165-319-11	CERAMIC CHIP 0.1uF	50V				
C009	1-126-206-11	ELECT CHIP 100uF 20%	6.3V				
C011	1-163-037-11	CERAMIC CHIP 0.022uF 10%	25V				
C017	1-164-161-11	CERAMIC CHIP 0.0022uF 10%	100V				
C018	1-163-021-91	CERAMIC CHIP 0.01uF 10%	50V				
C019	1-163-021-91	CERAMIC CHIP 0.01uF 10%	50V				
C020	1-124-779-00	ELECT CHIP 10uF 20%	16V				
C021	1-165-319-11	CERAMIC CHIP 0.1uF	50V				
C022	1-124-779-00	ELECT CHIP 10uF 20%	16V				
C024	1-163-227-11	CERAMIC CHIP 10PF 0.5PF	50V				
C025	1-124-779-00	ELECT CHIP 10uF 20%	16V				
C026	1-165-319-11	CERAMIC CHIP 0.1uF	50V				
C027	1-163-021-91	CERAMIC CHIP 0.01uF 10%	50V				
C028	1-163-227-11	CERAMIC CHIP 10PF 0.5PF	50V				
C029	1-165-319-11	CERAMIC CHIP 0.1uF	50V				
C030	1-163-031-11	CERAMIC CHIP 0.01uF	50V				
C031	1-165-319-11	CERAMIC CHIP 0.1uF	50V				
C032	1-126-193-11	ELECT 1uF 20%	50V				
C034	1-163-021-91	CERAMIC CHIP 0.01uF 10%	50V				

Ref. No.	Part No.	Description			Remark
C101	1-163-031-11	CERAMIC CHIP	0.01uF		50V
C102	1-163-031-11	CERAMIC CHIP	0.01uF		50V
C103	1-126-204-11	ELECT CHIP	47uF	20%	16V
C104	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V
C105	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C106	1-163-031-11	CERAMIC CHIP	0.01uF		50V
C107	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C108	1-163-035-00	CERAMIC CHIP	0.047uF		50V
C111	1-163-031-11	CERAMIC CHIP	0.01uF		50V
C112	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C113	1-163-020-00	CERAMIC CHIP	0.0082uF	10%	50V
C115	1-163-020-00	CERAMIC CHIP	0.0082uF	10%	50V
C117	1-163-020-00	CERAMIC CHIP	0.0082uF	10%	50V
C118	1-163-237-11	CERAMIC CHIP	27PF	5%	50V
C119	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V
C120	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C121	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C122	1-163-019-00	CERAMIC CHIP	0.0068uF	10%	50V
C123	1-124-779-00	ELECT CHIP	10uF	20%	16V
C126	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C128	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C129	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C133	1-163-031-11	CERAMIC CHIP	0.01uF		50V
C504	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C505	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C506	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C508	1-126-205-11	ELECT CHIP	47uF	20%	6.3V
C509	1-107-823-11	CERAMIC CHIP	0.47uF	10%	16V
C510	1-163-031-11	CERAMIC CHIP	0.01uF		50V
C511	1-126-205-11	ELECT CHIP	47uF	20%	6.3V
C512	1-126-193-11	ELECT	1uF	20%	50V
C513	1-164-161-11	CERAMIC CHIP	0.0022uF	10%	100V
C514	1-163-031-11	CERAMIC CHIP	0.01uF		50V
C515	1-126-206-11	ELECT CHIP	100uF	20%	6.3V
< CONNECTOR >					
CN001	1-770-699-11	CONNECTOR, FFC/FPC 16P			
* CN002	1-691-551-11	PIN, CONNECTOR (SMD) 8P			
CN003	1-750-345-11	CONNECTOR, FFC/EPC (ZIF) 30P			
* CN004	1-564-033-11	PIN, CONNECTOR 8P			
CN005	1-770-692-11	CONNECTOR, FFC/FPC 9P			
* CN006	1-691-074-11	HOUSING, CONNECTOR 15P			
* CN007	1-691-074-11	HOUSING, CONNECTOR 15P			
CN008	1-770-697-11	CONNECTOR, FFC/FPC 14P			
< DIODE >					
D001	8-719-026-23	DIODE MA786-TX			
D002	8-719-106-53	DIODE RD10M-T1B			
D004	8-719-938-78	DIODE SB10-05PCP-TD			
D011	8-719-026-23	DIODE MA786-TX			
D012	8-719-026-23	DIODE MA786-TX			
D501	8-719-938-78	DIODE SB10-05PCP-TD			
D502	8-719-108-24	DIODE MA151A-TX			
< FUSE >					
▲F001	1-532-777-21	FUSE, MICRO (SECONDARY) (1.25A) (DSR-40			

Ref. No.	Part No.	Description	Remark
< FILTER >			
FL001	1-233-351-21	FILTER, BAND PASS	
FL002	1-233-350-21	FILTER, BAND PASS	
< IC >			
IC001	8-759-062-66	IC TC7S66F(TE85R)	
IC002	8-759-235-19	IC TC74HC08AF(EL)	
IC003	8-752-888-43	IC CXP912032-073R-T6	
IC005	8-759-327-00	IC CXA8044Q-T4	
IC006	8-759-085-67	IC uPC339G2-E2	
IC008	8-759-186-44	IC TC74VHC125F(EL)	
IC009	8-759-182-89	IC BA6219BFP-Y-E2	
IC011	8-759-148-05	IC CXA8010M-E1	
IC012	8-759-945-17	IC MB3775PF-G-BND-ER	
IC014	8-759-510-73	IC BA10393F-E2	
IC016	8-759-510-71	IC BA10358F-E2	
IC017	8-759-011-65	IC TC74HC4053AF(EL)	
IC018	8-759-085-67	IC uPC339G2-E2	
IC019	8-759-510-71	IC BA10358F-E2	
IC021	8-759-335-42	IC CXA1793N-E2	
IC022	8-759-339-61	IC LB1897D	
IC501	8-759-098-24	IC PQ30RV11	
IC503	8-759-339-61	IC LB1897D	
< COIL >			
L003	1-412-282-41	INDUCTOR	470uH
L004	1-414-398-11	INDUCTOR	10uH
L005	1-414-398-11	INDUCTOR	10uH
L006	1-414-398-11	INDUCTOR	10uH
L007	1-414-402-11	INDUCTOR	47uH
L008	1-424-522-21	INDUCTOR	10uH
L010	1-424-522-21	INDUCTOR	10uH
L011	1-409-535-41	INDUCTOR	100uH
L013	1-424-524-21	INDUCTOR	47uH
L014	1-414-402-11	INDUCTOR	47uH
L501	1-414-402-11	INDUCTOR	47uH
L502	1-414-402-11	INDUCTOR	47uH
< IC LINK >			
△PS001	1-532-840-21	LINK, IC (1.25A) (DSR-40P)	
< TRANSISTOR >			
Q001	8-729-216-22	TRANSISTOR	2SB709A-QRS-TX
Q002	8-729-421-19	TRANSISTOR	UN2213-TX
Q003	8-729-010-25	TRANSISTOR	MSD601-RT1
Q004	8-729-421-22	TRANSISTOR	UN2211-TX
Q008	8-729-010-25	TRANSISTOR	MSD601-RT1
Q009	8-729-010-25	TRANSISTOR	MSD601-RT1
Q012	8-729-208-96	TRANSISTOR	2SA1242-Y(TE16L)
Q014	8-729-421-19	TRANSISTOR	UN2213-TX
Q500	8-729-216-22	TRANSISTOR	2SB709A-QRS-TX
Q501	8-729-216-22	TRANSISTOR	2SB709A-QRS-TX
Q502	8-729-208-96	TRANSISTOR	2SA1242-Y(TE16L)
Q503	8-729-421-19	TRANSISTOR	UN2213-TX
Q504	8-729-421-19	TRANSISTOR	UN2213-TX

Les composants identifiés par une marque  $\Delta$  sont critiques pour la sécurité.  
Ne les remplacer que par une pièce portant le numéro spécifié.



Ref. No.	Part No.	Description	Remark			
< RESISTOR >						
R001	1-216-057-00	METAL CHIP	2.2K	5%	1/10W	
R002	1-216-065-91	RES,CHIP	4.7K	5%	1/10W	
R003	1-216-015-00	METAL CHIP	39	5%	1/10W	
R005	1-216-057-00	METAL CHIP	2.2K	5%	1/10W	
R006	1-216-089-91	RES,CHIP	47K	5%	1/10W	
R009	1-216-049-91	RES,CHIP	1K	5%	1/10W	
R010	1-216-089-91	RES,CHIP	47K	5%	1/10W	
R011	1-216-089-91	RES,CHIP	47K	5%	1/10W	
R012	1-216-089-91	RES,CHIP	47K	5%	1/10W	
R015	1-216-295-91	SHORT	0			
R016	1-216-089-91	RES,CHIP	47K	5%	1/10W	
R017	1-216-295-91	SHORT	0			
R018	1-216-089-91	RES,CHIP	47K	5%	1/10W	
R019	1-216-295-91	SHORT	0			
R020	1-216-093-91	RES,CHIP	68K	5%	1/10W	
R021	1-216-089-91	RES,CHIP	47K	5%	1/10W	
R026	1-216-049-91	RES,CHIP	1K	5%	1/10W	
R027	1-216-089-91	RES,CHIP	47K	5%	1/10W	
R028	1-216-077-00	RES,CHIP	1K	5%	1/10W	
R029	1-216-049-91	RES,CHIP	1K	5%	1/10W	
R030	1-216-049-91	RES,CHIP	1K	5%	1/10W	
R032	1-216-049-91	RES,CHIP	1K	5%	1/10W	
R033	1-216-049-91	RES,CHIP	1K	5%	1/10W	
R035	1-216-025-91	RES,CHIP	100	5%	1/10W	
R036	1-216-025-91	RES,CHIP	100	5%	1/10W	
R039	1-216-075-00	METAL CHIP	12K	5%	1/10W	
R040	1-216-069-00	METAL CHIP	6.8K	5%	1/10W	
R046	1-216-069-00	METAL CHIP	6.8K	5%	1/10W	
R050	1-216-077-00	METAL CHIP	15K	5%	1/10W	
R051	1-216-073-00	METAL CHIP	10K	5%	1/10W	
R052	1-216-089-91	RES,CHIP	47K	5%	1/10W	
R053	1-216-049-91	RES,CHIP	1K	5%	1/10W	
R054	1-216-295-91	SHORT	0			
R055	1-216-049-91	RES,CHIP	1K	5%	1/10W	
R059	1-216-043-91	RES,CHIP	560	5%	1/10W	
R060	1-216-049-91	RES,CHIP	1K	5%	1/10W	
R061	1-216-049-91	RES,CHIP	1K	5%	1/10W	
R063	1-216-049-91	RES,CHIP	1K	5%	1/10W	
R064	1-216-049-91	RES,CHIP	1K	5%	1/10W	
R066	1-216-025-91	RES,CHIP	100	5%	1/10W	
R067	1-216-073-00	METAL CHIP	10K	5%	1/10W	
R069	1-216-085-00	METAL CHIP	33K	5%	1/10W	
R070	1-216-073-00	METAL CHIP	10K	5%	1/10W	
R071	1-216-025-91	RES,CHIP	100	5%	1/10W	
R075	1-216-049-91	RES,CHIP	1K	5%	1/10W	
R076	1-216-057-00	METAL CHIP	2.2K	5%	1/10W	
R077	1-216-025-91	RES,CHIP	100	5%	1/10W	
R078	1-216-049-91	RES,CHIP	1K	5%	1/10W	
R079	1-216-073-00	METAL CHIP	10K	5%	1/10W	
R080	1-216-025-91	RES,CHIP	100	5%	1/10W	
R081	1-216-049-91	RES,CHIP	1K	5%	1/10W	
R082	1-216-073-00	METAL CHIP	10K	5%	1/10W	
R083	1-216-089-91	RES,CHIP	47K	5%	1/10W	
R084	1-216-025-91	RES,CHIP	100	5%	1/10W	
R085	1-216-049-91	RES,CHIP	1K	5%	1/10W	
R086	1-216-049-91	RES,CHIP	1K	5%	1/10W	
R087	1-216-049-91	RES,CHIP	1K	5%	1/10W	
R088	1-216-049-91	RES,CHIP	1K	5%	1/10W	
R089	1-216-049-91	RES,CHIP	1K	5%	1/10W	

Ref. No.	Part No.	Description	Remark			
R090	1-216-081-00	METAL CHIP	22K	5%	1/10W	
R091	1-216-081-00	METAL CHIP	22K	5%	1/10W	
R092	1-216-089-91	RES,CHIP	47K	5%	1/10W	
R093	1-216-049-91	RES,CHIP	1K	5%	1/10W	
R094	1-216-671-11	METAL CHIP	6.8K	0.5%	1/10W	
R095	1-216-645-11	METAL CHIP	560	0.5%	1/10W	
R096	1-216-651-11	METAL CHIP	1K	0.5%	1/10W	
R097	1-216-073-00	METAL CHIP	10K	5%	1/10W	
R098	1-216-121-91	RES,CHIP	1M	5%	1/10W	
R099	1-216-105-91	RES,CHIP	220K	5%	1/10W	
R102	1-216-089-91	RES,CHIP	47K	5%	1/10W	
R103	1-216-089-91	RES,CHIP	47K	5%	1/10W	
R104	1-216-295-91	SHORT	0			
R107	1-216-089-91	RES,CHIP	47K	5%	1/10W	
R108	1-216-295-91	SHORT	0			
R109	1-216-081-00	METAL CHIP	22K	5%	1/10W	
R110	1-216-073-00	METAL CHIP	10K	5%	1/10W	
R111	1-216-049-91	RES,CHIP	1K	5%	1/10W	
R112	1-216-081-00	METAL CHIP	22K	5%	1/10W	
R113	1-216-049-91	RES,CHIP	1K	5%	1/10W	
R114	1-216-065-91	RES,CHIP	4.7K	5%	1/10W	
R115	1-216-043-91	RES,CHIP	560	5%	1/10W	
R116	1-216-057-00	METAL CHIP	2.2K	5%	1/10W	
R117	1-216-043-91	RES,CHIP	560	5%	1/10W	
R118	1-216-057-00	METAL CHIP	2.2K	5%	1/10W	
R119	1-216-073-00	METAL CHIP	10K	5%	1/10W	
R120	1-216-073-00	METAL CHIP	10K	5%	1/10W	
R121	1-219-107-91	RES,CHIP	1.5	5%	1/8W	
R122	1-219-107-91	RES,CHIP	1.5	5%	1/8W	
R125	1-219-107-91	RES,CHIP	1.5	5%	1/8W	
R126	1-216-049-91	RES,CHIP	1K	5%	1/10W	
R127	1-216-049-91	RES,CHIP	1K	5%	1/10W	
R128	1-216-049-91	RES,CHIP	1K	5%	1/10W	
R129	1-216-049-91	RES,CHIP	1K	5%	1/10W	
R130	1-216-025-91	RES,CHIP	100	5%	1/10W	
R131	1-216-025-91	RES,CHIP	100	5%	1/10W	
R132	1-216-025-91	RES,CHIP	100	5%	1/10W	
R133	1-216-075-00	METAL CHIP	12K	5%	1/10W	
R134	1-216-072-00	METAL CHIP	9.1K	5%	1/10W	
R136	1-216-049-91	RES,CHIP	1K	5%	1/10W	
R137	1-216-049-91	RES,CHIP	1K	5%	1/10W	
R138	1-216-049-91	RES,CHIP	1K	5%	1/10W	
R143	1-216-073-00	METAL CHIP	10K	5%	1/10W	
R146	1-216-295-91	SHORT	0			
R148	1-216-017-91	RES,CHIP	47	5%	1/10W	
R153	1-216-295-91	SHORT	0			
R154	1-216-295-91	SHORT	0			
R155	1-216-295-91	SHORT	0			
R158	1-216-121-91	RES,CHIP	1M	5%	1/10W	
R161	1-216-295-91	SHORT	0			
R164	1-216-672-11	METAL CHIP	7.5K	0.5%	1/10W	
R165	1-216-017-91	RES,CHIP	47	5%	1/10W	
R167	1-216-017-91	RES,CHIP	47	5%	1/10W	
R168	1-216-055-00	METAL CHIP	1.8K	5%	1/10W	
R169	1-216-055-00	METAL CHIP	1.8K	5%	1/10W	
R171	1-216-059-00	METAL CHIP	2.7K	5%	1/10W	
R176	1-216-033-00	METAL CHIP	220	5%	1/10W	
R182	1-216-121-91	RES,CHIP	1M	5%	1/10W	
R193	1-216-079-00	METAL CHIP	18K	5%	1/10W	
R194	1-216-057-00	METAL CHIP	2.2K	5%	1/10W	

Ref. No.	Part No.	Description			Remark	Ref. No.	Part No.	Description			Remark
R195	1-216-079-00	METAL CHIP	18K	5%	1/10W	R528	1-216-295-91	SHORT	0		
R196	1-216-057-00	METAL CHIP	2.2K	5%	1/10W	R529	1-219-107-91	RES,CHIP	1.5	5%	1/8W
R201	1-216-073-00	METAL CHIP	10K	5%	1/10W	R530	1-219-107-91	RES,CHIP	1.5	5%	1/8W
R203	1-216-121-91	RES,CHIP	1M	5%	1/10W	R531	1-219-107-91	RES,CHIP	1.5	5%	1/8W
R206	1-216-073-00	METAL CHIP	10K	5%	1/10W	R535	1-216-089-91	RES,CHIP	47K	5%	1/10W
R207	1-216-073-00	METAL CHIP	10K	5%	1/10W	R536	1-216-295-91	SHORT	0		
R208	1-216-045-00	METAL CHIP	680	5%	1/10W	R537	1-216-295-91	SHORT	0		
R209	1-216-045-00	METAL CHIP	680	5%	1/10W	R538	1-216-295-91	SHORT	0		
R211	1-216-671-11	METAL CHIP	6.8K	0.5%	1/10W	R541	1-216-073-00	METAL CHIP	10K	5%	1/10W
R212	1-216-645-11	METAL CHIP	560	0.5%	1/10W	R542	1-216-073-00	METAL CHIP	10K	5%	1/10W
R213	1-216-651-11	METAL CHIP	1K	0.5%	1/10W	R543	1-216-025-91	RES,CHIP	100	5%	1/10W
R214	1-216-073-00	METAL CHIP	10K	5%	1/10W	R545	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R215	1-216-105-91	RES,CHIP	220K	5%	1/10W	R546	1-216-073-00	METAL CHIP	10K	5%	1/10W
R216	1-216-081-00	METAL CHIP	22K	5%	1/10W	R547	1-216-025-91	RES,CHIP	100	5%	1/10W
R217	1-216-073-00	METAL CHIP	10K	5%	1/10W	R549	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R218	1-216-081-00	METAL CHIP	22K	5%	1/10W	R550	1-216-073-00	METAL CHIP	10K	5%	1/10W
R220	1-216-043-91	RES,CHIP	560	5%	1/10W	R551	1-216-089-91	RES,CHIP	47K	5%	1/10W
R221	1-216-057-00	METAL CHIP	2.2K	5%	1/10W	R552	1-216-089-91	RES,CHIP	47K	5%	1/10W
R225	1-216-295-91	SHORT	0			R553	1-216-073-00	METAL CHIP	10K	5%	1/10W
R227	1-216-057-00	METAL CHIP	2.2K	5%	1/10W	R554	1-216-073-00	METAL CHIP	10K	5%	1/10W
R228	1-216-043-91	RES,CHIP	560	5%	1/10W	R555	1-216-073-00	METAL CHIP	10K	5%	1/10W
R229	1-216-048-00	METAL CHIP	910	5%	1/10W	R556	1-216-025-91	RES,CHIP	100	5%	1/10W
R230	1-216-071-00	METAL CHIP	8.2K	5%	1/10W	R560	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R231	1-216-048-00	METAL CHIP	910	5%	1/10W	R561	1-216-049-91	RES,CHIP	1K	5%	1/10W
R232	1-216-071-00	METAL CHIP	8.2K	5%	1/10W	R562	1-216-049-91	RES,CHIP	1K	5%	1/10W
R233	1-216-089-91	RES,CHIP	47K	5%	1/10W	R563	1-216-049-91	RES,CHIP	1K	5%	1/10W
R234	1-216-075-00	METAL CHIP	12K	5%	1/10W	R564	1-216-049-91	RES,CHIP	1K	5%	1/10W
R235	1-216-072-00	METAL CHIP	9.1K	5%	1/10W	R565	1-216-049-91	RES,CHIP	1K	5%	1/10W
R241	1-216-073-00	METAL CHIP	10K	5%	1/10W	R566	1-216-049-91	RES,CHIP	1K	5%	1/10W
R244	1-216-077-00	METAL CHIP	15K	5%	1/10W	R567	1-216-017-91	RES,CHIP	47	5%	1/10W
R245	1-217-671-11	METAL CHIP	1	5%	1/10W	R568	1-216-017-91	RES,CHIP	47	5%	1/10W
R247	1-216-073-00	METAL CHIP	10K	5%	1/10W	R569	1-216-017-91	RES,CHIP	47	5%	1/10W
R248	1-217-671-11	METAL CHIP	1	5%	1/10W	R570	1-216-017-91	RES,CHIP	47	5%	1/10W
R249	1-217-671-11	METAL CHIP	1	5%	1/10W	R572	1-216-295-91	SHORT	0		
R250	1-217-671-11	METAL CHIP	1	5%	1/10W	R573	1-216-049-91	RES,CHIP	1K	5%	1/10W
R253	1-216-073-00	METAL CHIP	10K	5%	1/10W	R574	1-216-049-91	RES,CHIP	1K	5%	1/10W
R256	1-216-075-00	METAL CHIP	12K	5%	1/10W	R575	1-216-049-91	RES,CHIP	1K	5%	1/10W
R257	1-216-079-00	METAL CHIP	18K	5%	1/10W	R901	1-216-295-91	SHORT	0 (DSR-40)		
R259	1-216-295-91	SHORT	0			R902	1-216-295-91	SHORT	0 (DSR-40P)		
R262	1-216-093-91	RES,CHIP	68K	5%	1/10W	< VIBRATOR >					
R268	1-216-097-91	RES,CHIP	100K	5%	1/10W	X001	1-760-655-21	VIBRATOR, CRYSTAL (20MHZ)			
R270	1-216-073-00	METAL CHIP	10K	5%	1/10W	FP-406 BOARD, COMPLETE					
R271	1-216-073-00	METAL CHIP	10K	5%	1/10W	*****					
R274	1-216-073-00	METAL CHIP	10K	5%	1/10W	(Ref No. 8,000 Series)					
R275	1-216-099-00	METAL CHIP	120K	5%	1/10W	1-658-990-11	FP-406 FLEXIBLE BOARD				
R283	1-216-089-91	RES,CHIP	47K	5%	1/10W	3-318-201-11	SCREW (B) (1.4X3), TAPPING				
R284	1-216-025-91	RES,CHIP	100	5%	1/10W	3-967-690-01	HOLDER, MIC				
R285	1-216-025-91	RES,CHIP	100	5%	1/10W	3-970-665-01	CLEANER, MIC				
R286	1-216-049-91	RES,CHIP	1K	5%	1/10W	< CONNECTOR >					
R290	1-216-055-00	METAL CHIP	1.8K	5%	1/10W	CN901	1-770-312-21	CONNECTOR 4P			
R506	1-216-049-91	RES,CHIP	1K	5%	1/10W	< SWITCH >					
R516	1-216-295-91	SHORT	0			S901	1-762-551-11	SWITCH, PUSH (REC PROOF)			
R517	1-216-665-11	METAL CHIP	3.9K	0.5%	1/10W	S902	1-572-288-11	SWITCH, PUSH (C IN)			
R518	1-216-655-11	METAL CHIP	1.5K	0.5%	1/10W						
R519	1-216-089-91	RES,CHIP	47K	5%	1/10W						
R520	1-216-089-91	RES,CHIP	47K	5%	1/10W						
R521	1-216-089-91	RES,CHIP	47K	5%	1/10W						
R524	1-216-089-91	RES,CHIP	47K	5%	1/10W						
R525	1-216-025-91	RES,CHIP	100	5%	1/10W						
R526	1-216-025-91	RES,CHIP	100	5%	1/10W						

Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
*	A-7073-774-A	FR-158 BOARD, COMPLETE				< FLUORECENT INDICATOR >	
		*****					
		(Ref.No. 3,000 Series)		ND101	1-517-769-11	TUBE, FLUORESCENT INDICATOR	
*	3-987-166-01	HOLDER, INDICATION TUBE				< TRANSISTOR >	
		< BUZZER >		Q101	8-729-424-18	TRANSISTOR UN2113-TX	
BZ101	1-529-104-11	BUZZER, PIEZOELECTRIC		Q103	8-729-421-19	TRANSISTOR UN2213-TX	
		< CAPACITOR >		Q104	8-729-421-19	TRANSISTOR UN2213-TX	
C109	1-113-682-11	TANTAL. CHIP 33uF 20% 10V		Q105	8-729-421-19	TRANSISTOR UN2213-TX	
C110	1-164-156-11	CERAMIC CHIP 0.1uF 25V		Q106	8-729-421-19	TRANSISTOR UN2213-TX	
C111	1-164-156-11	CERAMIC CHIP 0.1uF 25V				< RESISTOR >	
C112	1-113-682-11	TANTAL. CHIP 33uF 20% 10V		Q107	8-729-421-19	TRANSISTOR UN2213-TX	
C115	1-164-357-11	CERAMIC CHIP 1000PF 5% 50V		Q110	8-729-421-19	TRANSISTOR UN2213-TX	
C117	1-164-357-11	CERAMIC CHIP 1000PF 5% 50V				< RESISTOR >	
C118	1-164-357-11	CERAMIC CHIP 1000PF 5% 50V		R103	1-216-842-11	METAL CHIP 56K 5% 1/16W	
		< CONNECTOR >		R104	1-216-813-11	METAL CHIP 220 5% 1/16W	
CN104	1-774-770-11	CONNECTOR, FFC/FPC 30P		R105	1-216-811-11	METAL CHIP 150 5% 1/16W	
		< DIODE >		R106	1-216-841-11	METAL CHIP 47K 5% 1/16W	
D101	8-719-104-34	DIODE MA151WA-TX		R107	1-216-841-11	METAL CHIP 47K 5% 1/16W	
D102	8-719-106-08	DIODE RD6.2M-T1B2		R108	1-216-841-11	METAL CHIP 47K 5% 1/16W	
D108	8-719-061-58	DIODE CL-200Y-C-TU (DUP)		R109	1-216-841-11	METAL CHIP 47K 5% 1/16W	
D109	8-719-989-53	DIODE CL-200HR-C-TUL (REC)		R110	1-216-841-11	METAL CHIP 47K 5% 1/16W	
D110	8-719-061-58	DIODE CL-200Y-C-TU (PAUSE)		R111	1-216-841-11	METAL CHIP 47K 5% 1/16W	
				R112	1-216-841-11	METAL CHIP 47K 5% 1/16W	
D111	8-719-061-58	DIODE CL-200Y-C-TU (FF)		R113	1-216-841-11	METAL CHIP 47K 5% 1/16W	
D112	8-719-066-82	DIODE CL-200YG-C-TU (PLAY)		R114	1-216-837-11	METAL CHIP 22K 5% 1/16W	
D113	8-719-027-84	DIODE CL-155UR/G-DT (ON/STANDBY)		R115	1-216-837-11	METAL CHIP 22K 5% 1/16W	
D114	8-719-106-08	DIODE RD6.2M-T1B2		R119	1-216-797-11	METAL CHIP 10 5% 1/16W	
D115	8-719-106-08	DIODE RD6.2M-T1B2		R120	1-216-797-11	METAL CHIP 10 5% 1/16W	
				R121	1-216-797-11	METAL CHIP 10 5% 1/16W	
D116	8-719-106-08	DIODE RD6.2M-T1B2		R122	1-216-797-11	METAL CHIP 10 5% 1/16W	
D117	8-719-061-58	DIODE CL-200Y-C-TU (REW)		R123	1-216-864-11	METAL CHIP 0 5% 1/16W	
		< FERRITE BEAD >		R124	1-216-864-11	METAL CHIP 0 5% 1/16W	
FB101	1-414-445-11	FERRITE 0UH		R125	1-216-833-11	METAL CHIP 10K 5% 1/16W	
FB102	1-414-445-11	FERRITE 0UH		R126	1-216-833-11	METAL CHIP 10K 5% 1/16W	
FB103	1-414-445-11	FERRITE 0UH		R129	1-216-837-11	METAL CHIP 22K 5% 1/16W	
FB104	1-414-445-11	FERRITE 0UH		R130	1-216-833-11	METAL CHIP 10K 5% 1/16W	
FB105	1-414-445-11	FERRITE 0UH		R131	1-216-833-11	METAL CHIP 10K 5% 1/16W	
				R138	1-216-825-11	METAL CHIP 2.2K 5% 1/16W	
FB106	1-414-445-11	FERRITE 0UH		R139	1-216-837-11	METAL CHIP 22K 5% 1/16W	
FB107	1-414-445-11	FERRITE 0UH		R140	1-216-833-11	METAL CHIP 10K 5% 1/16W	
FB108	1-414-445-11	FERRITE 0UH		R141	1-216-829-11	METAL CHIP 4.7K 5% 1/16W	
FB109	1-414-445-11	FERRITE 0UH		R142	1-216-827-11	METAL CHIP 3.3K 5% 1/16W	
FB110	1-414-445-11	FERRITE 0UH		R143	1-216-825-11	METAL CHIP 2.2K 5% 1/16W	
				R145	1-216-797-11	METAL CHIP 10 5% 1/16W	
FB111	1-414-445-11	FERRITE 0UH		R146	1-216-797-11	METAL CHIP 10 5% 1/16W	
FB112	1-414-229-11	INDUCTOR CHIP 0UH		R147	1-216-797-11	METAL CHIP 10 5% 1/16W	
FB113	1-414-229-11	INDUCTOR CHIP 0UH		R148	1-216-797-11	METAL CHIP 10 5% 1/16W	
FB114	1-414-229-11	INDUCTOR CHIP 0UH		R149	1-216-821-11	METAL CHIP 1K 5% 1/16W	
FB115	1-414-229-11	INDUCTOR CHIP 0UH					
				R151	1-216-813-11	METAL CHIP 220 5% 1/16W	
FB116	1-414-229-11	INDUCTOR CHIP 0UH		R152	1-216-814-11	METAL CHIP 270 5% 1/16W	
FB117	1-414-229-11	INDUCTOR CHIP 0UH		R153	1-216-813-11	METAL CHIP 220 5% 1/16W	
		< IC >		R154	1-216-813-11	METAL CHIP 220 5% 1/16W	
IC103	8-759-056-81	IC M66312FP-T1		R155	1-216-811-11	METAL CHIP 150 5% 1/16W	
IC104	8-759-438-82	IC uPD16311GC-AB6		R156	1-216-813-11	METAL CHIP 220 5% 1/16W	
						< SWITCH >	
				S101	1-762-333-21	SWITCH, TACTILE (CL)	
				S102	1-572-272-11	SWITCH, SLIDE (LOCAL/REMOTE)	
				S104	1-572-272-11	SWITCH, SLIDE (TIMER)	



# GL-10

Ref. No.	Part No.	Description	Remark
FB1102	1-414-445-11	FERRITE	OUH
FB1103	1-414-445-11	FERRITE	OUH
FB1104	1-414-445-11	FERRITE	OUH
FB1105	1-414-445-11	FERRITE	OUH
FB1106	1-414-445-11	FERRITE	OUH
FB1107	1-414-445-11	FERRITE	OUH
FB1108	1-414-445-11	FERRITE	OUH
< IC >			
IC1101	8-759-987-27	IC LM1881MX	
IC1102	8-759-523-78	IC TC74VHC00FT(EL)	
IC1103	8-759-523-79	IC TC74VHC02FT(EL)	
IC1104	8-759-523-97	IC TC74VHC123AFT(EL)	
IC1105	8-759-523-97	IC TC74VHC123AFT(EL) (DSR-40)	
IC1106	8-759-035-90	IC TC7S02F(TE85R)	
IC1107	8-759-524-48	IC TC74VHC393FT(EL)	
IC1108	8-759-524-19	IC TC74VHC164FT(EL)	
IC1109	8-752-335-47	IC CXD1216M-T6	
IC1111	8-759-523-78	IC TC74VHC00FT(EL)	
IC1112	8-759-524-19	IC TC74VHC164FT(EL) (DSR-40)	
IC1113	8-759-523-02	IC TC74HC4053AFT(EL)	
IC1115	8-759-524-48	IC TC74VHC393FT(EL)	
IC1116	8-759-523-97	IC TC74VHC123AFT(EL)	
IC1117	8-759-524-19	IC TC74VHC164FT(EL)	
IC1118	8-759-510-71	IC uPC358G2-E2	
IC1119	8-759-510-71	IC uPC358G2-E2	
IC1120	8-759-523-78	IC TC74VHC00FT(EL)	
IC1121	8-759-524-27	IC TC74VHC244FT(EL)	
IC1122	8-759-524-18	IC TC74VHC163FT(EL)	
IC1123	8-759-524-19	IC TC74VHC164FT(EL)	
IC1124	8-752-341-58	IC CXD1217Q-T4	
IC1125	8-759-524-18	IC TC74VHC163FT(EL)	
IC1126	8-759-491-46	IC TC74VHC04FT(EL)	
IC1127	8-759-523-95	IC TC74VHC74FT(EL)	
IC1128	8-759-523-97	IC TC74VHC123AFT(EL)	
IC1129	8-759-524-19	IC TC74VHC164FT(EL)	
IC1130	8-759-031-84	IC TC7S04F(TE85R)	
IC1131	8-759-524-19	IC TC74VHC164FT(EL)	
IC1132	8-759-510-71	IC uPC358G2-E2	
IC1133	8-759-523-97	IC TC74VHC123AFT(EL)	
IC1134	8-759-524-19	IC TC74VHC164FT(EL)	
IC1135	8-759-195-81	IC TC7S86FU(TE85R)	
IC1136	8-759-182-88	IC PQ09TZ5U	
IC1137	8-759-510-71	IC uPC358G2-E2	
IC1138	8-759-523-96	IC TC74VHC86FT(EL)	
IC1139	8-759-234-20	IC TC7S08F(TE85R)	
IC1140	8-759-157-22	IC PQ05TZ1U	
IC1141	8-752-341-58	IC CXD1217Q-T4	
IC1142	8-759-524-48	IC TC74VHC393FT(EL)	
IC1143	8-759-524-19	IC TC74VHC164FT(EL) (DSR-40)	
IC1144	8-759-524-19	IC TC74VHC164FT(EL)	
< COIL >			
L1101	1-412-029-11	INDUCTOR CHIP 10uH	
L1102	1-412-029-11	INDUCTOR CHIP 10uH	
L1103	1-412-029-11	INDUCTOR CHIP 10uH	
L1104	1-412-029-11	INDUCTOR CHIP 10uH	
L1105	1-412-029-11	INDUCTOR CHIP 10uH	

Ref. No.	Part No.	Description	Remark
< TRANSISTOR >			
Q1101	8-729-427-83	TRANSISTOR XP6501-TXE	
Q1102	8-729-905-35	TRANSISTOR 2SC4081T106R	
Q1103	8-729-141-53	TRANSISTOR 2SK94-T1X2X3X4	
Q1104	8-729-026-53	TRANSISTOR 2SA1576A-T106-QR	
Q1105	8-729-026-52	TRANSISTOR 2SA1576A-T106-R	
Q1106	8-729-026-52	TRANSISTOR 2SA1576A-T106-R	
< RESISTOR >			
R1101	1-216-821-11	METAL CHIP 1K	5% 1/16W
R1102	1-216-827-11	METAL CHIP 3.3K	5% 1/16W
R1103	1-216-821-11	METAL CHIP 1K	5% 1/16W
R1104	1-216-825-11	METAL CHIP 2.2K	5% 1/16W
R1105	1-216-825-11	METAL CHIP 2.2K	5% 1/16W
R1106	1-216-825-11	METAL CHIP 2.2K	5% 1/16W
R1107	1-216-839-11	METAL CHIP 33K	5% 1/16W
R1108	1-216-825-11	METAL CHIP 2.2K	5% 1/16W
R1109	1-216-829-11	METAL CHIP 4.7K	5% 1/16W
R1110	1-216-851-11	METAL CHIP 330K	5% 1/16W
R1111	1-216-849-11	METAL CHIP 220K	5% 1/16W
R1112	1-218-893-11	RES,CHIP 82K	0.50% 1/16W
R1113	1-218-895-11	RES,CHIP 100K	0.50% 1/16W
R1114	1-216-821-11	METAL CHIP 1K	5% 1/16W
R1115	1-216-864-11	METAL CHIP 0	5% 1/16W (DSR-40)
R1116	1-216-864-11	METAL CHIP 0	5% 1/16W (DSR-40P)
R1117	1-218-895-11	RES,CHIP 100K	0.50% 1/16W
R1118	1-216-864-11	METAL CHIP 0	5% 1/16W (DSR-40)
R1119	1-216-864-11	METAL CHIP 0	5% 1/16W (DSR-40P)
R1120	1-218-871-11	RES,CHIP 10K	0.50% 1/16W
R1121	1-216-837-11	METAL CHIP 22K	5% 1/16W (DSR-40)
R1122	1-216-843-11	METAL CHIP 68K	5% 1/16W (DSR-40P)
R1123	1-216-864-11	METAL CHIP 0	5% 1/16W (DSR-40P)
R1124	1-216-864-11	METAL CHIP 0	5% 1/16W (DSR-40P)
R1125	1-216-864-11	METAL CHIP 0	5% 1/16W (DSR-40P)
R1126	1-216-864-11	METAL CHIP 0	5% 1/16W (DSR-40)
R1127	1-216-845-11	METAL CHIP 100K	5% 1/16W
R1128	1-216-833-11	METAL CHIP 10K	5% 1/16W
R1129	1-216-833-11	METAL CHIP 10K	5% 1/16W
R1130	1-216-821-11	METAL CHIP 1K	5% 1/16W
R1131	1-216-829-11	METAL CHIP 4.7K	5% 1/16W
R1132	1-216-821-11	METAL CHIP 1K	5% 1/16W
R1133	1-216-833-11	METAL CHIP 10K	5% 1/16W
R1134	1-216-827-11	METAL CHIP 3.3K	5% 1/16W
R1135	1-216-825-11	METAL CHIP 2.2K	5% 1/16W
R1136	1-216-839-11	METAL CHIP 33K	5% 1/16W
R1137	1-216-833-11	METAL CHIP 10K	5% 1/16W
R1138	1-216-831-11	METAL CHIP 6.8K	5% 1/16W
R1139	1-218-854-11	RES,CHIP 2K	0.50% 1/16W

Ref. No.	Part No.	Description			Remark	Ref. No.	Part No.	Description			Remark
R1140	1-216-833-11	METAL CHIP	10K	5%	1/16W	R1192	1-216-864-11	METAL CHIP	0	5%	1/16W
R1141	1-216-821-11	METAL CHIP	1K	5%	1/16W						(DSR-40P)
						R1193	1-216-864-11	METAL CHIP	0	5%	1/16W
R1142	1-216-844-11	METAL CHIP	82K	5%	1/16W						(DSR-40P)
R1143	1-216-809-11	METAL CHIP	100	5%	1/16W	R1194	1-216-837-11	METAL CHIP	22K	5%	1/16W
R1145	1-216-843-11	METAL CHIP	68K	5%	1/16W						(DSR-40)
R1146	1-216-821-11	METAL CHIP	1K	5%	1/16W						
R1147	1-216-864-11	METAL CHIP	0	5%	1/16W	R1195	1-216-864-11	METAL CHIP	0	5%	1/16W
					(DSR-40)						(DSR-40P)
						R1196	1-216-864-11	METAL CHIP	0	5%	1/16W
R1148	1-216-864-11	METAL CHIP	0	5%	1/16W						(DSR-40P)
					(DSR-40)	R1197	1-216-843-11	METAL CHIP	68K	5%	1/16W
R1149	1-216-864-11	METAL CHIP	0	5%	1/16W						
					(DSR-40P)	R1198	1-216-864-11	METAL CHIP	0	5%	1/16W
R1150	1-218-854-11	RES,CHIP	2K	0.50%	1/16W						(DSR-40)
						R1199	1-216-864-11	METAL CHIP	0	5%	1/16W
R1151	1-216-833-11	METAL CHIP	10K	5%	1/16W						(DSR-40P)
R1152	1-216-839-11	METAL CHIP	33K	5%	1/16W	R1200	1-216-864-11	METAL CHIP	0	5%	1/16W
R1153	1-216-809-11	METAL CHIP	100	5%	1/16W						(DSR-40)
R1154	1-216-837-11	METAL CHIP	22K	5%	1/16W						
R1155	1-216-833-11	METAL CHIP	10K	5%	1/16W	R1201	1-216-864-11	METAL CHIP	0	5%	1/16W
											(DSR-40P)
R1156	1-216-864-11	METAL CHIP	0	5%	1/16W	R1202	1-216-819-11	METAL CHIP	680	5%	1/16W
					(DSR-40P)						(DSR-40)
R1157	1-216-864-11	METAL CHIP	0	5%	1/16W	R1203	1-216-864-11	METAL CHIP	0	5%	1/16W
					(DSR-40)						(DSR-40)
R1158	1-216-809-11	METAL CHIP	100	5%	1/16W						
R1159	1-216-833-11	METAL CHIP	10K	5%	1/16W						
R1160	1-218-881-11	RES,CHIP	27K	0.50%	1/16W						
R1161	1-218-881-11	RES,CHIP	27K	0.50%	1/16W						
R1162	1-218-855-11	RES,CHIP	2.2K	0.50%	1/16W						
R1163	1-218-854-11	RES,CHIP	2K	0.50%	1/16W						
R1164	1-216-833-11	METAL CHIP	10K	5%	1/16W						
R1165	1-216-839-11	METAL CHIP	33K	5%	1/16W						
R1166	1-216-809-11	METAL CHIP	100	5%	1/16W						
R1167	1-216-833-11	METAL CHIP	10K	5%	1/16W						
R1168	1-216-837-11	METAL CHIP	22K	5%	1/16W						
R1170	1-216-864-11	METAL CHIP	0	5%	1/16W						
R1171	1-216-864-11	METAL CHIP	0	5%	1/16W						
R1173	1-216-809-11	METAL CHIP	100	5%	1/16W						
R1174	1-216-833-11	METAL CHIP	10K	5%	1/16W						
R1175	1-218-851-11	RES,CHIP	1.5K	0.50%	1/16W						
R1176	1-218-881-11	RES,CHIP	27K	0.50%	1/16W						
R1177	1-218-881-11	RES,CHIP	27K	0.50%	1/16W						
R1178	1-216-831-11	METAL CHIP	6.8K	5%	1/16W						
R1179	1-216-818-11	METAL CHIP	560	5%	1/16W						
					(DSR-40)						
R1179	1-216-825-11	METAL CHIP	2.2K	5%	1/16W						
					(DSR-40P)						
R1180	1-216-864-11	METAL CHIP	0	5%	1/16W						
R1182	1-218-854-11	RES,CHIP	2K	0.50%	1/16W						
R1183	1-218-823-11	RES,CHIP	100	0.50%	1/16W						
R1184	1-216-829-11	METAL CHIP	4.7K	5%	1/16W						
R1185	1-218-851-11	RES,CHIP	1.5K	0.50%	1/16W						
R1186	1-216-829-11	METAL CHIP	4.7K	5%	1/16W						
R1187	1-218-823-11	RES,CHIP	100	0.50%	1/16W						
R1188	1-216-829-11	METAL CHIP	4.7K	5%	1/16W						
R1189	1-216-864-11	METAL CHIP	0	5%	1/16W						
					(DSR-40P)						
R1190	1-216-864-11	METAL CHIP	0	5%	1/16W						
					(DSR-40)						
R1191	1-216-864-11	METAL CHIP	0	5%	1/16W						
					(DSR-40)						

# HP-118

Ref. No.	Part No.	Description	Remark
C210	1-162-915-11	CERAMIC CHIP 10PF 0.5PF 50V	
C211	1-162-915-11	CERAMIC CHIP 10PF 0.5PF 50V	
C212	1-162-915-11	CERAMIC CHIP 10PF 0.5PF 50V	
C213	1-162-915-11	CERAMIC CHIP 10PF 0.5PF 50V	
C214	1-126-204-11	ELECT CHIP 47uF 20% 16V	
C215	1-126-204-11	ELECT CHIP 47uF 20% 16V	
C216	1-162-915-11	CERAMIC CHIP 10PF 0.5PF 50V	
C217	1-162-915-11	CERAMIC CHIP 10PF 0.5PF 50V	
C218	1-126-204-11	ELECT CHIP 47uF 20% 16V	
C219	1-126-204-11	ELECT CHIP 47uF 20% 16V	
C701	1-124-778-00	ELECT CHIP 22uF 20% 6.3V	
C702	1-124-778-00	ELECT CHIP 22uF 20% 6.3V	
C703	1-162-923-11	CERAMIC CHIP 47PF 5% 50V	
C704	1-164-360-11	CERAMIC CHIP 0.1uF 16V	
C705	1-162-923-11	CERAMIC CHIP 47PF 5% 50V	
C706	1-164-360-11	CERAMIC CHIP 0.1uF 16V	
C707	1-164-360-11	CERAMIC CHIP 0.1uF 16V	
C708	1-128-004-11	ELECT CHIP 10uF 20% 16V	
C709	1-128-004-11	ELECT CHIP 10uF 20% 16V	
C710	1-162-919-11	CERAMIC CHIP 22PF 5% 50V	
C711	1-162-919-11	CERAMIC CHIP 22PF 5% 50V	
C712	1-162-919-11	CERAMIC CHIP 22PF 5% 50V	
C713	1-164-360-11	CERAMIC CHIP 0.1uF 16V	
C714	1-164-360-11	CERAMIC CHIP 0.1uF 16V	
C715	1-164-389-11	CERAMIC CHIP 300PF 5% 50V	
C716	1-164-360-11	CERAMIC CHIP 0.1uF 16V	
C717	1-164-389-11	CERAMIC CHIP 300PF 5% 50V	
C718	1-162-919-11	CERAMIC CHIP 22PF 5% 50V	
C719	1-164-360-11	CERAMIC CHIP 0.1uF 16V	
C720	1-164-360-11	CERAMIC CHIP 0.1uF 16V	
C721	1-162-923-11	CERAMIC CHIP 47PF 5% 50V	
C722	1-164-360-11	CERAMIC CHIP 0.1uF 16V	
C723	1-104-852-11	TANTAL. CHIP 22uF 20% 10V	
C724	1-164-389-11	CERAMIC CHIP 300PF 5% 50V	
C725	1-164-360-11	CERAMIC CHIP 0.1uF 16V	
C726	1-164-389-11	CERAMIC CHIP 300PF 5% 50V	
C727	1-164-360-11	CERAMIC CHIP 0.1uF 16V	
C728	1-162-923-11	CERAMIC CHIP 47PF 5% 50V	
C729	1-164-360-11	CERAMIC CHIP 0.1uF 16V	
C730	1-164-360-11	CERAMIC CHIP 0.1uF 16V	
C731	1-164-360-11	CERAMIC CHIP 0.1uF 16V	
C732	1-104-852-11	TANTAL. CHIP 22uF 20% 10V	
C733	1-164-360-11	CERAMIC CHIP 0.1uF 16V	
C734	1-135-179-21	TANTAL. CHIP 2.2uF 20% 16V	
C735	1-135-179-21	TANTAL. CHIP 2.2uF 20% 16V	
C736	1-164-360-11	CERAMIC CHIP 0.1uF 16V	
C737	1-164-389-11	CERAMIC CHIP 300PF 5% 50V	
C738	1-164-360-11	CERAMIC CHIP 0.1uF 16V	
C739	1-164-389-11	CERAMIC CHIP 300PF 5% 50V	
C740	1-164-360-11	CERAMIC CHIP 0.1uF 16V	
C741	1-104-852-11	TANTAL. CHIP 22uF 20% 10V	
C742	1-164-389-11	CERAMIC CHIP 300PF 5% 50V	
C743	1-164-360-11	CERAMIC CHIP 0.1uF 16V	
C744	1-164-389-11	CERAMIC CHIP 300PF 5% 50V	
C745	1-164-360-11	CERAMIC CHIP 0.1uF 16V	
C746	1-164-360-11	CERAMIC CHIP 0.1uF 16V	
C747	1-162-915-11	CERAMIC CHIP 10PF 0.5PF 50V	
C748	1-164-360-11	CERAMIC CHIP 0.1uF 16V	
C749	1-164-360-11	CERAMIC CHIP 0.1uF 16V	
C750	1-164-360-11	CERAMIC CHIP 0.1uF 16V	

Ref. No.	Part No.	Description	Remark
C751	1-162-923-11	CERAMIC CHIP 47PF 5% 50V	
C752	1-164-360-11	CERAMIC CHIP 0.1uF 16V	
C753	1-164-360-11	CERAMIC CHIP 0.1uF 16V	
C754	1-162-915-11	CERAMIC CHIP 10PF 0.5PF 50V	
C755	1-164-677-11	CERAMIC CHIP 0.033uF 10% 16V	
C756	1-164-360-11	CERAMIC CHIP 0.1uF 16V	
C757	1-164-677-11	CERAMIC CHIP 0.033uF 10% 16V	
C758	1-164-677-11	CERAMIC CHIP 0.033uF 10% 16V	
C759	1-164-677-11	CERAMIC CHIP 0.033uF 10% 16V	
C760	1-162-923-11	CERAMIC CHIP 47PF 5% 50V	
C761	1-164-677-11	CERAMIC CHIP 0.033uF 10% 16V	
C762	1-164-677-11	CERAMIC CHIP 0.033uF 10% 16V	
C763	1-164-360-11	CERAMIC CHIP 0.1uF 16V	
C764	1-128-004-11	ELECT CHIP 10uF 20% 16V	
C765	1-164-360-11	CERAMIC CHIP 0.1uF 16V	
C766	1-128-004-11	ELECT CHIP 10uF 20% 16V	
C767	1-164-677-11	CERAMIC CHIP 0.033uF 10% 16V	
C768	1-164-677-11	CERAMIC CHIP 0.033uF 10% 16V	
C771	1-164-360-11	CERAMIC CHIP 0.1uF 16V	
C772	1-162-923-11	CERAMIC CHIP 47PF 5% 50V	
C773	1-164-360-11	CERAMIC CHIP 0.1uF 16V	
C774	1-162-923-11	CERAMIC CHIP 47PF 5% 50V	
C890	1-164-360-11	CERAMIC CHIP 0.1uF 16V	
C892	1-164-360-11	CERAMIC CHIP 0.1uF 16V	
C893	1-115-581-11	TANTAL. CHIP 100uF 20% 16V	
C895	1-115-581-11	TANTAL. CHIP 100uF 20% 16V	
C898	1-104-823-11	TANTAL. CHIP 47uF 20% 16V	
C899	1-104-823-11	TANTAL. CHIP 47uF 20% 16V	
C900	1-164-360-11	CERAMIC CHIP 0.1uF 16V	
C901	1-164-360-11	CERAMIC CHIP 0.1uF 16V	
C906	1-164-360-11	CERAMIC CHIP 0.1uF 16V	
C907	1-164-360-11	CERAMIC CHIP 0.1uF 16V	
C910	1-109-994-11	CERAMIC CHIP 2.2uF 10% 10V	
< CONNECTOR >			
CN200	1-566-536-11	CONNECTOR, FPC (ZIF) 20P	
CN201	1-506-493-11	PIN, CONNECTOR 14P	
* CN701	1-691-551-11	PIN, CONNECTOR (SMD) 8P	
< DIODE >			
D001	8-719-421-59	DIODE MA3075WA-(TX)	
D002	8-719-421-59	DIODE MA3075WA-(TX)	
D003	8-719-421-59	DIODE MA3075WA-(TX)	
D004	8-719-421-59	DIODE MA3075WA-(TX)	
D005	8-719-421-59	DIODE MA3075WA-(TX)	
D006	8-719-421-59	DIODE MA3075WA-(TX)	
D007	8-719-421-59	DIODE MA3075WA-(TX)	
D008	8-719-421-59	DIODE MA3075WA-(TX)	
D009	8-719-421-59	DIODE MA3075WA-(TX)	
D010	8-719-421-59	DIODE MA3075WA-(TX)	
D011	8-719-421-59	DIODE MA3075WA-(TX)	
D012	8-719-421-59	DIODE MA3075WA-(TX)	
D203	8-719-941-86	DIODE DAN202UT106	
D204	8-719-941-86	DIODE DAN202UT106	
D858	8-719-073-01	DIODE MA111-(K8).SO	
D859	8-719-073-01	DIODE MA111-(K8).SO	
D861	8-719-400-56	DIODE MA3062H-TX	
D863	8-719-059-18	DIODE RD6.2FM-T1	

Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
< FERRITE BEAD >				R005	1-216-835-11	METAL CHIP 15K 5%	1/16W
FB001	1-500-241-22	FERRITE 0UH		R006	1-216-831-11	METAL CHIP 6.8K 5%	1/16W
FB002	1-500-241-22	FERRITE 0UH		R007	1-216-831-11	METAL CHIP 6.8K 5%	1/16W
FB003	1-500-241-22	FERRITE 0UH		R008	1-216-835-11	METAL CHIP 15K 5%	1/16W
< IC >				R009	1-216-821-11	METAL CHIP 1K 5%	1/16W
IC001	8-759-369-73	IC NJM4556AM-A-TE2		R010	1-216-821-11	METAL CHIP 1K 5%	1/16W
IC201	8-759-700-94	IC NJM5532M(Te2)		R011	1-216-809-11	METAL CHIP 100 5%	1/16W
IC204	8-759-700-94	IC NJM5532M(Te2)		R012	1-216-809-11	METAL CHIP 100 5%	1/16W
IC205	8-759-700-94	IC NJM5532M(Te2)		R122	1-218-831-11	RES,CHIP 220 0.50%	1/16W
IC701	8-759-745-64	IC NJM4560M-TE2		R200	1-216-864-11	METAL CHIP 0 5%	1/16W
IC702	8-759-523-02	IC TC74HC4053AFT(EL)		R201	1-218-833-11	RES,CHIP 270 0.50%	1/16W
IC703	8-759-523-02	IC TC74HC4053AFT(EL)		R202	1-218-836-11	RES,CHIP 360 0.50%	1/16W
IC704	8-759-745-64	IC NJM4560M-TE2		R203	1-218-847-11	RES,CHIP 1K 0.50%	1/16W
IC705	8-759-358-47	IC NJM2115V(Te2)		R204	1-218-823-11	RES,CHIP 100 0.50%	1/16W
IC706	8-759-745-64	IC NJM4560M-TE2		R205	1-218-833-11	RES,CHIP 270 0.50%	1/16W
IC707	8-759-358-47	IC NJM2115V(Te2)		R206	1-218-836-11	RES,CHIP 360 0.50%	1/16W
IC708	8-759-481-66	IC DS1801E-014TE2		R207	1-218-847-11	RES,CHIP 1K 0.50%	1/16W
IC709	8-759-358-47	IC NJM2115V(Te2)		R208	1-218-823-11	RES,CHIP 100 0.50%	1/16W
IC710	8-759-358-47	IC NJM2115V(Te2)		R209	1-216-864-11	METAL CHIP 0 5%	1/16W
IC711	8-759-523-02	IC TC74HC4053AFT(EL)		R210	1-216-864-11	METAL CHIP 0 5%	1/16W
IC712	8-759-745-64	IC NJM4560M-TE2		R211	1-216-864-11	METAL CHIP 0 5%	1/16W
IC713	8-759-358-47	IC NJM2115V(Te2)		R212	1-216-813-11	METAL CHIP 220 5%	1/16W
IC714	8-759-358-47	IC NJM2115V(Te2)		R213	1-216-813-11	METAL CHIP 220 5%	1/16W
IC715	8-759-745-64	IC NJM4560M-TE2		R218	1-218-868-11	RES,CHIP 7.5K 0.50%	1/16W
IC716	8-759-745-64	IC NJM4560M-TE2		R219	1-218-855-11	RES,CHIP 2.2K 0.50%	1/16W
IC717	8-759-358-47	IC NJM2115V(Te2)		R220	1-211-981-11	RES,CHIP 33 0.50%	1/16W
IC718	8-759-358-47	IC NJM2115V(Te2)		R221	1-218-868-11	RES,CHIP 7.5K 0.50%	1/16W
IC862	8-759-822-95	IC L79M05T-FA-TL		R222	1-218-855-11	RES,CHIP 2.2K 0.50%	1/16W
IC863	8-759-157-22	IC PQ05TZ1U		R223	1-211-981-11	RES,CHIP 33 0.50%	1/16W
IC864	8-759-929-26	IC TL431CPSR		R224	1-218-855-11	RES,CHIP 2.2K 0.50%	1/16W
< JACK >				R225	1-218-855-11	RES,CHIP 2.2K 0.50%	1/16W
J001	1-569-809-11	JACK (SMALL TYPE) (PHONES)		R226	1-218-855-11	RES,CHIP 2.2K 0.50%	1/16W
< COIL >				R227	1-218-855-11	RES,CHIP 2.2K 0.50%	1/16W
L856	1-412-028-11	INDUCTOR CHIP 4.7uH		R228	1-218-868-11	RES,CHIP 7.5K 0.50%	1/16W
L857	1-412-028-11	INDUCTOR CHIP 4.7uH		R229	1-218-868-11	RES,CHIP 7.5K 0.50%	1/16W
< TRANSISTOR >				R230	1-218-827-11	RES,CHIP 150 0.50%	1/16W
Q201	8-729-028-70	TRANSISTOR UN2225T-(TX)		R231	1-218-827-11	RES,CHIP 150 0.50%	1/16W
Q202	8-729-028-70	TRANSISTOR UN2225T-(TX)		R232	1-218-868-11	RES,CHIP 7.5K 0.50%	1/16W
Q701	8-729-015-76	TRANSISTOR UN5211-TX		R233	1-218-868-11	RES,CHIP 7.5K 0.50%	1/16W
Q702	8-729-015-74	TRANSISTOR UN5111-TX		R234	1-218-830-11	RES,CHIP 200 0.50%	1/16W
Q703	8-729-905-35	TRANSISTOR 2SC4081T106R		R235	1-211-981-11	RES,CHIP 33 0.50%	1/16W
Q704	8-729-905-35	TRANSISTOR 2SC4081T106R		R236	1-218-868-11	RES,CHIP 7.5K 0.50%	1/16W
Q705	8-729-402-42	TRANSISTOR UN5213-TX		R237	1-218-855-11	RES,CHIP 2.2K 0.50%	1/16W
Q706	8-729-403-35	TRANSISTOR UN5113-TX		R238	1-218-830-11	RES,CHIP 200 0.50%	1/16W
Q707	8-729-015-76	TRANSISTOR UN5211-TX		R239	1-218-868-11	RES,CHIP 7.5K 0.50%	1/16W
Q708	8-729-028-70	TRANSISTOR UN2225T-(TX)		R240	1-218-855-11	RES,CHIP 2.2K 0.50%	1/16W
Q709	8-729-028-70	TRANSISTOR UN2225T-(TX)		R241	1-211-981-11	RES,CHIP 33 0.50%	1/16W
Q710	8-729-028-70	TRANSISTOR UN2225T-(TX)		R242	1-218-871-11	RES,CHIP 10K 0.50%	1/16W
Q711	8-729-028-70	TRANSISTOR UN2225T-(TX)		R243	1-218-871-11	RES,CHIP 10K 0.50%	1/16W
Q853	8-729-014-91	TRANSISTOR 2SD2185S-TX		R244	1-218-871-11	RES,CHIP 10K 0.50%	1/16W
< RESISTOR >				R245	1-218-871-11	RES,CHIP 10K 0.50%	1/16W
R001	1-216-833-11	METAL CHIP 10K 5%	1/16W	R246	1-218-855-11	RES,CHIP 2.2K 0.50%	1/16W
R002	1-216-821-11	METAL CHIP 1K 5%	1/16W	R247	1-218-855-11	RES,CHIP 2.2K 0.50%	1/16W
R003	1-216-821-11	METAL CHIP 1K 5%	1/16W	R248	1-218-868-11	RES,CHIP 7.5K 0.50%	1/16W
R004	1-216-833-11	METAL CHIP 10K 5%	1/16W	R249	1-218-872-11	RES,CHIP 11K 0.50%	1/16W
				R251	1-218-868-11	RES,CHIP 7.5K 0.50%	1/16W
				R253	1-218-872-11	RES,CHIP 11K 0.50%	1/16W
				R254	1-216-864-11	METAL CHIP 0 5%	1/16W
							(DSR-40)



# HP-118

Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
R255	1-216-864-11	METAL CHIP	0 5% 1/16W (DSR-40P)	R759	1-216-841-11	METAL CHIP	47K 5% 1/16W
R257	1-216-864-11	METAL CHIP	0 5% 1/16W (DSR-40)	R760	1-218-332-11	RES,CHIP	130K 5% 1/16W
R258	1-216-864-11	METAL CHIP	0 5% 1/16W (DSR-40P)	R761	1-218-332-11	RES,CHIP	130K 5% 1/16W
R701	1-216-833-11	METAL CHIP	10K 5% 1/16W	R762	1-216-841-11	METAL CHIP	47K 5% 1/16W
R702	1-218-871-11	RES,CHIP	10K 0.50% 1/16W	R763	1-216-833-11	METAL CHIP	10K 5% 1/16W
R703	1-218-871-11	RES,CHIP	10K 0.50% 1/16W	R764	1-216-849-11	METAL CHIP	220K 5% 1/16W
R704	1-216-833-11	METAL CHIP	10K 5% 1/16W	R765	1-216-833-11	METAL CHIP	10K 5% 1/16W
R705	1-216-833-11	METAL CHIP	10K 5% 1/16W	R766	1-218-882-11	RES,CHIP	30K 0.50% 1/16W
R706	1-216-833-11	METAL CHIP	10K 5% 1/16W	R767	1-218-862-11	RES,CHIP	4.3K 0.50% 1/16W
R707	1-216-833-11	METAL CHIP	10K 5% 1/16W	R768	1-216-833-11	METAL CHIP	10K 5% 1/16W
R708	1-216-833-11	METAL CHIP	10K 5% 1/16W	R769	1-216-833-11	METAL CHIP	10K 5% 1/16W
R711	1-216-864-11	METAL CHIP	0 5% 1/16W	R770	1-216-833-11	METAL CHIP	10K 5% 1/16W
R712	1-216-864-11	METAL CHIP	0 5% 1/16W	R771	1-216-833-11	METAL CHIP	10K 5% 1/16W
R713	1-218-875-11	RES,CHIP	15K 0.50% 1/16W	R772	1-216-825-11	METAL CHIP	2.2K 5% 1/16W
R714	1-218-875-11	RES,CHIP	15K 0.50% 1/16W	R773	1-216-825-11	METAL CHIP	2.2K 5% 1/16W
R715	1-216-833-11	METAL CHIP	10K 5% 1/16W	R774	1-216-833-11	METAL CHIP	10K 5% 1/16W
R716	1-216-833-11	METAL CHIP	10K 5% 1/16W	R775	1-218-823-11	RES,CHIP	100 0.50% 1/16W
R717	1-218-875-11	RES,CHIP	15K 0.50% 1/16W	R776	1-216-829-11	METAL CHIP	4.7K 5% 1/16W
R718	1-218-875-11	RES,CHIP	15K 0.50% 1/16W	R777	1-216-829-11	METAL CHIP	4.7K 5% 1/16W
R719	1-216-864-11	METAL CHIP	0 5% 1/16W	R778	1-216-829-11	METAL CHIP	4.7K 5% 1/16W
R720	1-216-833-11	METAL CHIP	10K 5% 1/16W	R779	1-216-828-11	METAL CHIP	3.9K 5% 1/16W
R721	1-218-823-11	RES,CHIP	100 0.50% 1/16W	R780	1-216-828-11	METAL CHIP	3.9K 5% 1/16W
R722	1-218-887-11	RES,CHIP	47K 0.50% 1/16W	R781	1-216-849-11	METAL CHIP	220K 5% 1/16W
R723	1-216-837-11	METAL CHIP	22K 5% 1/16W	R782	1-218-823-11	RES,CHIP	100 0.50% 1/16W
R724	1-216-864-11	METAL CHIP	0 5% 1/16W	R783	1-218-290-11	RES,CHIP	6.2K 5% 1/16W
R725	1-216-833-11	METAL CHIP	10K 5% 1/16W	R784	1-218-290-11	RES,CHIP	6.2K 5% 1/16W
R726	1-218-823-11	RES,CHIP	100 0.50% 1/16W	R785	1-216-831-11	METAL CHIP	6.8K 5% 1/16W
R727	1-216-845-11	METAL CHIP	100K 5% 1/16W	R786	1-218-882-11	RES,CHIP	30K 0.50% 1/16W
R728	1-216-845-11	METAL CHIP	100K 5% 1/16W	R787	1-218-862-11	RES,CHIP	4.3K 0.50% 1/16W
R729	1-216-845-11	METAL CHIP	100K 5% 1/16W	R788	1-216-831-11	METAL CHIP	6.8K 5% 1/16W
R730	1-216-845-11	METAL CHIP	100K 5% 1/16W	R789	1-216-829-11	METAL CHIP	4.7K 5% 1/16W
R731	1-216-837-11	METAL CHIP	22K 5% 1/16W	R790	1-218-823-11	RES,CHIP	100 0.50% 1/16W
R732	1-216-833-11	METAL CHIP	10K 5% 1/16W	R791	1-216-809-11	METAL CHIP	100 5% 1/16W
R733	1-216-833-11	METAL CHIP	10K 5% 1/16W	R792	1-216-840-11	METAL CHIP	39K 5% 1/16W
R734	1-218-887-11	RES,CHIP	47K 0.50% 1/16W	R793	1-218-823-11	RES,CHIP	100 0.50% 1/16W
R735	1-216-833-11	METAL CHIP	10K 5% 1/16W	R794	1-216-833-11	METAL CHIP	10K 5% 1/16W
R736	1-216-833-11	METAL CHIP	10K 5% 1/16W	R795	1-216-840-11	METAL CHIP	39K 5% 1/16W
R737	1-216-833-11	METAL CHIP	10K 5% 1/16W	R796	1-216-809-11	METAL CHIP	100 5% 1/16W
R738	1-216-833-11	METAL CHIP	10K 5% 1/16W	R797	1-216-821-11	METAL CHIP	1K 5% 1/16W
R739	1-216-819-11	METAL CHIP	680 5% 1/16W	R798	1-218-847-11	RES,CHIP	1K 0.50% 1/16W
R740	1-216-819-11	METAL CHIP	680 5% 1/16W	R799	1-218-847-11	RES,CHIP	1K 0.50% 1/16W
R741	1-216-833-11	METAL CHIP	10K 5% 1/16W	R801	1-218-831-11	RES,CHIP	220 0.50% 1/16W
R742	1-218-871-11	RES,CHIP	10K 0.50% 1/16W	R804	1-216-840-11	METAL CHIP	39K 5% 1/16W
R743	1-216-841-11	METAL CHIP	47K 5% 1/16W	R805	1-216-840-11	METAL CHIP	39K 5% 1/16W
R744	1-216-833-11	METAL CHIP	10K 5% 1/16W	R807	1-216-864-11	METAL CHIP	0 5% 1/16W
R745	1-216-833-11	METAL CHIP	10K 5% 1/16W	R809	1-216-833-11	METAL CHIP	10K 5% 1/16W
R746	1-216-841-11	METAL CHIP	47K 5% 1/16W	R810	1-216-833-11	METAL CHIP	10K 5% 1/16W
R747	1-216-833-11	METAL CHIP	10K 5% 1/16W	R811	1-216-833-11	METAL CHIP	10K 5% 1/16W
R748	1-218-871-11	RES,CHIP	10K 0.50% 1/16W	R812	1-216-833-11	METAL CHIP	10K 5% 1/16W
R749	1-216-833-11	METAL CHIP	10K 5% 1/16W	R813	1-216-833-11	METAL CHIP	10K 5% 1/16W
R750	1-216-833-11	METAL CHIP	10K 5% 1/16W	R814	1-216-833-11	METAL CHIP	10K 5% 1/16W
R753	1-218-332-11	RES,CHIP	130K 5% 1/16W	R880	1-216-864-11	METAL CHIP	0 5% 1/16W
R754	1-218-332-11	RES,CHIP	130K 5% 1/16W	R948	1-216-170-00	RES,CHIP	68 5% 1/8W
R755	1-218-871-11	RES,CHIP	10K 0.50% 1/16W	R949	1-216-170-00	RES,CHIP	68 5% 1/8W
R756	1-218-293-11	RES,CHIP	24K 5% 1/16W	R951	1-216-037-00	METAL CHIP	330 5% 1/10W
R757	1-218-293-11	RES,CHIP	24K 5% 1/16W	R952	1-216-170-00	RES,CHIP	68 5% 1/8W
R758	1-216-833-11	METAL CHIP	10K 5% 1/16W	R953	1-216-170-00	RES,CHIP	68 5% 1/8W
				R955	1-216-170-00	RES,CHIP	68 5% 1/8W
				R956	1-216-170-00	RES,CHIP	68 5% 1/8W
				R957	1-216-061-00	METAL CHIP	3.3K 5% 1/10W

Ref. No.	Part No.	Description	Remark		
R959	1-218-867-11	RES,CHIP	6.8K	0.50%	1/16W
R960	1-218-871-11	RES,CHIP	10K	0.50%	1/16W
< VARIABLE RESISTOR >					
RV001	1-238-612-11	RES, VAR, CARBON 20K/20K (PHONE LEVEL)			
RV002	1-238-744-11	RES, VAR, CARBON, 50K (INPUT LEVEL CH-1)			
RV003	1-238-744-11	RES, VAR, CARBON, 50K (INPUT LEVEL CH-2)			
RV201	1-241-481-11	RES, ADJ, CERMET 100K			
RV202	1-241-481-11	RES, ADJ, CERMET 100K			
*	A-7067-130-A	JC-19 BOARD, COMPLETE (DSR-40)			
*	A-7067-126-A	JC-19 BOARD, COMPLETE (DSR-40P)			
*****					
(Ref.No. 5,000 Series)					
7-685-132-19	SCREW #P 2.6X5	TYPE2 NON-SLIT			
< CAPACITOR >					
C101	1-104-847-11	TANTAL. CHIP	22uF	20%	4V
C102	1-104-847-11	TANTAL. CHIP	22uF	20%	4V
C103	1-104-847-11	TANTAL. CHIP	22uF	20%	4V
C107	1-135-177-21	TANTALUM CHIP	1uF	20%	20V
C108	1-135-177-21	TANTALUM CHIP	1uF	20%	20V
C109	1-135-177-21	TANTALUM CHIP	1uF	20%	20V
C110	1-135-259-11	TANTAL. CHIP	10uF	20%	6.3V
C111	1-135-259-11	TANTAL. CHIP	10uF	20%	6.3V
C112	1-135-259-11	TANTAL. CHIP	10uF	20%	6.3V
C116	1-162-974-11	CERAMIC CHIP	0.01uF		50V
C117	1-162-974-11	CERAMIC CHIP	0.01uF		50V
C118	1-162-974-11	CERAMIC CHIP	0.01uF		50V
C119	1-162-915-11	CERAMIC CHIP	10PF	0.5PF	50V
C120	1-162-915-11	CERAMIC CHIP	10PF	0.5PF	50V
C121	1-162-915-11	CERAMIC CHIP	10PF	0.5PF	50V
C122	1-162-974-11	CERAMIC CHIP	0.01uF		50V
C123	1-162-974-11	CERAMIC CHIP	0.01uF		50V
C124	1-162-974-11	CERAMIC CHIP	0.01uF		50V
C125	1-162-974-11	CERAMIC CHIP	0.01uF		50V
C127	1-135-259-11	TANTAL. CHIP	10uF	20%	6.3V
C128	1-162-974-11	CERAMIC CHIP	0.01uF		50V
C129	1-135-259-11	TANTAL. CHIP	10uF	20%	6.3V
C130	1-162-974-11	CERAMIC CHIP	0.01uF		50V
C131	1-162-974-11	CERAMIC CHIP	0.01uF		50V
C132	1-135-259-11	TANTAL. CHIP	10uF	20%	6.3V
C133	1-162-974-11	CERAMIC CHIP	0.01uF		50V
C135	1-162-974-11	CERAMIC CHIP	0.01uF		50V
C136	1-162-974-11	CERAMIC CHIP	0.01uF		50V
C137	1-162-974-11	CERAMIC CHIP	0.01uF		50V
C138	1-162-974-11	CERAMIC CHIP	0.01uF		50V
C139	1-135-259-11	TANTAL. CHIP	10uF	20%	6.3V
C141	1-135-259-11	TANTAL. CHIP	10uF	20%	6.3V
C143	1-135-259-11	TANTAL. CHIP	10uF	20%	6.3V
C148	1-162-974-11	CERAMIC CHIP	0.01uF		50V
C149	1-162-974-11	CERAMIC CHIP	0.01uF		50V
C150	1-162-974-11	CERAMIC CHIP	0.01uF		50V
C151	1-135-259-11	TANTAL. CHIP	10uF	20%	6.3V
C152	1-135-259-11	TANTAL. CHIP	10uF	20%	6.3V
C153	1-135-259-11	TANTAL. CHIP	10uF	20%	6.3V
C154	1-135-259-11	TANTAL. CHIP	10uF	20%	6.3V
C155	1-135-259-11	TANTAL. CHIP	10uF	20%	6.3V
C156	1-135-259-11	TANTAL. CHIP	10uF	20%	6.3V
C157	1-135-259-11	TANTAL. CHIP	10uF	20%	6.3V

Ref. No.	Part No.	Description	Remark		
C158	1-135-259-11	TANTAL. CHIP	10uF	20%	6.3V
C159	1-135-259-11	TANTAL. CHIP	10uF	20%	6.3V
C160	1-162-974-11	CERAMIC CHIP	0.01uF		50V
C161	1-162-974-11	CERAMIC CHIP	0.01uF		50V
C162	1-162-974-11	CERAMIC CHIP	0.01uF		50V
C163	1-162-974-11	CERAMIC CHIP	0.01uF		50V
C164	1-162-974-11	CERAMIC CHIP	0.01uF		50V
C165	1-162-974-11	CERAMIC CHIP	0.01uF		50V
C166	1-162-974-11	CERAMIC CHIP	0.01uF		50V
C167	1-162-974-11	CERAMIC CHIP	0.01uF		50V
C168	1-162-974-11	CERAMIC CHIP	0.01uF		50V
C170	1-162-974-11	CERAMIC CHIP	0.01uF		50V
C171	1-162-974-11	CERAMIC CHIP	0.01uF		50V
C172	1-162-974-11	CERAMIC CHIP	0.01uF		50V
C173	1-110-569-11	TANTAL. CHIP	47uF	20%	6.3V
C174	1-110-569-11	TANTAL. CHIP	47uF	20%	6.3V
C175	1-110-569-11	TANTAL. CHIP	47uF	20%	6.3V
C179	1-135-259-11	TANTAL. CHIP	10uF	20%	6.3V
C180	1-162-974-11	CERAMIC CHIP	0.01uF		50V
C181	1-162-921-11	CERAMIC CHIP	33PF	5%	50V
C182	1-135-259-11	TANTAL. CHIP	10uF	20%	6.3V
C183	1-135-259-11	TANTAL. CHIP	10uF	20%	6.3V
C184	1-162-974-11	CERAMIC CHIP	0.01uF		50V
C185	1-162-974-11	CERAMIC CHIP	0.01uF		50V
C186	1-104-847-11	TANTAL. CHIP	22uF	20%	4V
C187	1-104-847-11	TANTAL. CHIP	22uF	20%	4V
C201	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C202	1-164-357-11	CERAMIC CHIP	1000PF	5%	50V
C203	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C204	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C205	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C206	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C207	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C208	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C209	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C210	1-135-259-11	TANTAL. CHIP	10uF	20%	6.3V
C211	1-107-826-91	CERAMIC CHIP	0.1uF	10%	16V
C212	1-104-847-11	TANTAL. CHIP	22uF	20%	4V
C214	1-162-926-11	CERAMIC CHIP	82PF	5%	50V
C215	1-164-392-11	CERAMIC CHIP	390PF	5%	50V
C216	1-162-974-11	CERAMIC CHIP	0.01uF		50V
C217	1-135-259-11	TANTAL. CHIP	10uF	20%	6.3V
C218	1-162-974-11	CERAMIC CHIP	0.01uF		50V
C219	1-135-259-11	TANTAL. CHIP	10uF	20%	6.3V
C220	1-110-569-11	TANTAL. CHIP	47uF	20%	6.3V
C221	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C223	1-135-177-21	TANTALUM CHIP	1uF	20%	20V
C224	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C225	1-135-177-21	TANTALUM CHIP	1uF	20%	20V
C226	1-162-968-11	CERAMIC CHIP	0.0047uF	10%	50V
C227	1-162-967-11	CERAMIC CHIP	0.0033uF	10%	50V
C229	1-104-912-11	TANTAL. CHIP	3.3uF	20%	16V
C231	1-164-315-11	CERAMIC CHIP	470PF	5%	50V
C233	1-162-907-11	CERAMIC CHIP	2PF	0.25PF	50V
C234	1-162-974-11	CERAMIC CHIP	0.01uF		50V
C238	1-162-974-11	CERAMIC CHIP	0.01uF		50V
C241	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C243	1-164-360-11	CERAMIC CHIP	0.1uF		16V
C245	1-162-917-11	CERAMIC CHIP	15PF	5%	50V
C246	1-162-974-11	CERAMIC CHIP	0.01uF		50V

Ref. No.	Part No.	Description				Remark	Ref. No.	Part No.	Description				Remark
C247	1-162-974-11	CERAMIC CHIP	0.01uF		50V		C517	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V	
C248	1-162-974-11	CERAMIC CHIP	0.01uF		50V		C518	1-162-917-11	CERAMIC CHIP	15PF	5%	50V	
C249	1-104-908-11	TANTAL. CHIP	47uF	20%	4V		C519	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V	
C250	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V		C520	1-162-919-11	CERAMIC CHIP	22PF	5%	50V	
C252	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V		C521	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V	
C253	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V		C522	1-164-360-11	CERAMIC CHIP	0.1uF		16V	
C254	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V		C523	1-104-851-11	TANTAL. CHIP	10uF	20%	10V	
C255	1-164-357-11	CERAMIC CHIP	1000PF	5%	50V		C524	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V	
C256	1-162-974-11	CERAMIC CHIP	0.01uF		50V		C701	1-135-259-11	TANTAL. CHIP	10uF	20%	6.3V	
C257	1-164-357-11	CERAMIC CHIP	1000PF	5%	50V		C702	1-164-360-11	CERAMIC CHIP	0.1uF		16V	
C258	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V		C703	1-164-360-11	CERAMIC CHIP	0.1uF		16V	
C259	1-162-927-11	CERAMIC CHIP	100PF	5%	50V		C704	1-135-259-11	TANTAL. CHIP	10uF	20%	6.3V	
C260	1-104-912-11	TANTAL. CHIP	3.3uF	20%	16V		C705	1-164-360-11	CERAMIC CHIP	0.1uF		16V	
C261	1-164-677-11	CERAMIC CHIP	0.033uF	10%	16V		C706	1-164-360-11	CERAMIC CHIP	0.1uF		16V	
C262	1-165-128-11	CERAMIC CHIP	0.22uF		16V		C707	1-164-360-11	CERAMIC CHIP	0.1uF		16V	
C401	1-107-826-91	CERAMIC CHIP	0.1uF	10%	16V		C708	1-164-360-11	CERAMIC CHIP	0.1uF		16V	
C402	1-164-360-11	CERAMIC CHIP	0.1uF		16V		C709	1-164-360-11	CERAMIC CHIP	0.1uF		16V	
C403	1-164-360-11	CERAMIC CHIP	0.1uF		16V		C710	1-104-847-11	TANTAL. CHIP	22uF	20%	4V	
C404	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V		C711	1-164-360-11	CERAMIC CHIP	0.1uF		16V	
C405	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V		C712	1-109-982-11	CERAMIC CHIP	1uF	10%	10V	
C406	1-107-826-91	CERAMIC CHIP	0.1uF	10%	16V		C713	1-162-957-11	CERAMIC CHIP	220PF	5%	50V	
C407	1-135-259-11	TANTAL. CHIP	10uF	20%	6.3V		C714	1-162-919-11	CERAMIC CHIP	22PF	5%	50V	
C408	1-135-259-11	TANTAL. CHIP	10uF	20%	6.3V		C715	1-162-919-11	CERAMIC CHIP	22PF	5%	50V	
C410	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V		C801	1-162-974-11	CERAMIC CHIP	0.01uF		50V	
C412	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V		C802	1-162-923-11	CERAMIC CHIP	47PF	5%	50V	
C413	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V		C803	1-162-915-11	CERAMIC CHIP	10PF	0.5PF	50V	
C421	1-111-253-11	TANTAL. CHIP	100uF	20%	6.3V		C804	1-162-915-11	CERAMIC CHIP	10PF	0.5PF	50V	
C422	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V		C807	1-164-357-11	CERAMIC CHIP	1000PF	5%	50V	
C423	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V		C809	1-162-974-11	CERAMIC CHIP	0.01uF		50V	
C424	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V		C810	1-110-569-11	TANTAL. CHIP	47uF	20%	6.3V	
C425	1-165-176-11	CERAMIC CHIP	0.047uF	10%	16V		C811	1-162-923-11	CERAMIC CHIP	47PF	5%	50V	
C426	1-164-505-11	CERAMIC CHIP	2.2uF		16V		C812	1-110-569-11	TANTAL. CHIP	47uF	20%	6.3V	
C427	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V		C813	1-162-974-11	CERAMIC CHIP	0.01uF		50V	
C428	1-164-360-11	CERAMIC CHIP	0.1uF		16V		C814	1-162-974-11	CERAMIC CHIP	0.01uF		50V	
C429	1-164-360-11	CERAMIC CHIP	0.1uF		16V		C815	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V	
C430	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V		C816	1-162-974-11	CERAMIC CHIP	0.01uF		50V	
C431	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V		C831	1-135-259-11	TANTAL. CHIP	10uF	20%	6.3V	
C432	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V		C832	1-135-259-11	TANTAL. CHIP	10uF	20%	6.3V	
C433	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V		C833	1-110-569-11	TANTAL. CHIP	47uF	20%	6.3V	
C434	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V		C834	1-135-151-21	TANTALUM CHIP	4.7uF	20%	4V	
C435	1-165-176-11	CERAMIC CHIP	0.047uF	10%	16V		C835	1-135-151-21	TANTALUM CHIP	4.7uF	20%	4V	
C436	1-164-505-11	CERAMIC CHIP	2.2uF		16V		C837	1-162-923-11	CERAMIC CHIP	47PF	5%	50V	
C437	1-109-982-11	CERAMIC CHIP	1uF	10%	10V		C838	1-135-259-11	TANTAL. CHIP	10uF	20%	6.3V	
C438	1-109-982-11	CERAMIC CHIP	1uF	10%	10V		C839	1-162-923-11	CERAMIC CHIP	47PF	5%	50V	
C439	1-162-915-11	CERAMIC CHIP	10PF	0.5PF	50V		C840	1-135-259-11	TANTAL. CHIP	10uF	20%	6.3V	
C440	1-162-915-11	CERAMIC CHIP	10PF	0.5PF	50V		C843	1-162-923-11	CERAMIC CHIP	47PF	5%	50V	
C441	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V		C844	1-162-923-11	CERAMIC CHIP	47PF	5%	50V	
C442	1-135-259-11	TANTAL. CHIP	10uF	20%	6.3V		C845	1-104-847-11	TANTAL. CHIP	22uF	20%	4V	
C501	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V		C846	1-104-847-11	TANTAL. CHIP	22uF	20%	4V	
C502	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V		C847	1-164-676-11	CERAMIC CHIP	2200PF	5%	16V	
C503	1-104-851-11	TANTAL. CHIP	10uF	20%	10V		C848	1-164-676-11	CERAMIC CHIP	2200PF	5%	16V	
C504	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V		C849	1-135-181-21	TANTALUM CHIP	4.7uF	20%	6.3V	
C505	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V		C850	1-164-392-11	CERAMIC CHIP	390PF	5%	50V	
C506	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V		C851	1-164-392-11	CERAMIC CHIP	390PF	5%	50V	
C511	1-135-259-11	TANTAL. CHIP	10uF	20%	6.3V		C852	1-164-360-11	CERAMIC CHIP	0.1uF		16V	
C512	1-164-360-11	CERAMIC CHIP	0.1uF		16V		C853	1-135-181-21	TANTALUM CHIP	4.7uF	20%	6.3V	
C513	1-164-227-11	CERAMIC CHIP	0.022uF	10%	25V		C854	1-135-149-21	TANTALUM CHIP	2.2uF	20%	10V	
C514	1-164-360-11	CERAMIC CHIP	0.1uF		16V		C855	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V	
C515	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V		C856	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V	
C516	1-104-847-11	TANTAL. CHIP	22uF	20%	4V		C857	1-164-360-11	CERAMIC CHIP	0.1uF		16V	

Ref. No.	Part No.	Description			Remark
C859	1-164-360-11	CERAMIC CHIP	0.1uF		16V
C860	1-135-181-21	TANTALUM CHIP	4.7uF	20%	6.3V
C861	1-164-360-11	CERAMIC CHIP	0.1uF		16V
C862	1-135-151-21	TANTALUM CHIP	4.7uF	20%	4V
C863	1-165-176-11	CERAMIC CHIP	0.047uF	10%	16V
C864	1-115-467-11	CERAMIC CHIP	0.22uF	10%	10V
C865	1-110-569-11	TANTAL. CHIP	47uF	20%	6.3V
C901	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C902	1-164-360-11	CERAMIC CHIP	0.1uF		16V
C903	1-164-360-11	CERAMIC CHIP	0.1uF		16V
C904	1-135-259-11	TANTAL. CHIP	10uF	20%	6.3V
C905	1-164-360-11	CERAMIC CHIP	0.1uF		16V
C906	1-110-569-11	TANTAL. CHIP	47uF	20%	6.3V
C907	1-164-360-11	CERAMIC CHIP	0.1uF		16V
C908	1-164-360-11	CERAMIC CHIP	0.1uF		16V
C909	1-135-259-11	TANTAL. CHIP	10uF	20%	6.3V
C910	1-115-467-11	CERAMIC CHIP	0.22uF	10%	10V
C911	1-164-360-11	CERAMIC CHIP	0.1uF		16V
C912	1-107-826-91	CERAMIC CHIP	0.1uF	10%	16V
C914	1-162-966-11	CERAMIC CHIP	0.0022uF	10%	50V
C915	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C916	1-162-923-11	CERAMIC CHIP	47PF	5%	50V
C917	1-135-181-21	TANTALUM CHIP	4.7uF	20%	6.3V
C919	1-164-357-11	CERAMIC CHIP	1000PF	5%	50V
C920	1-164-357-11	CERAMIC CHIP	1000PF	5%	50V
C921	1-164-357-11	CERAMIC CHIP	1000PF	5%	50V
C922	1-115-566-11	CERAMIC CHIP	4.7uF	10%	10V
C924	1-164-360-11	CERAMIC CHIP	0.1uF		16V
C926	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C927	1-162-908-11	CERAMIC CHIP	3PF	0.25PF	50V
C929	1-164-357-11	CERAMIC CHIP	1000PF	5%	50V
C930	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C931	1-115-467-11	CERAMIC CHIP	0.22uF	10%	10V
C932	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C933	1-164-357-11	CERAMIC CHIP	1000PF	5%	50V
C934	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C935	1-164-360-11	CERAMIC CHIP	0.1uF		16V
C936	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C937	1-164-357-11	CERAMIC CHIP	1000PF	5%	50V
C940	1-164-357-11	CERAMIC CHIP	1000PF	5%	50V
C941	1-109-982-11	CERAMIC CHIP	1uF	10%	10V
C942	1-107-826-91	CERAMIC CHIP	0.1uF	10%	16V
< CONNECTOR >					
CN101	1-506-474-11	PIN, CONNECTOR 9P			
CN103	1-774-666-11	CONNECTOR, FFC/FPC 30P			
CN104	1-774-666-11	CONNECTOR, FFC/FPC 30P			
CN411	1-750-345-11	CONNECTOR, FFC/EPC (ZIF) 30P			
CN412	1-750-345-11	CONNECTOR, FFC/EPC (ZIF) 30P			
* CN501	1-691-591-11	PIN, CONNECTOR (1.5MM) (SMD)8P			
CN503	1-750-303-41	CONNECTOR, BOARD TO BOARD 20P			
* CN701	1-564-005-11	PIN, CONNECTOR 6P			
* CN831	1-691-591-11	PIN, CONNECTOR (1.5MM) (SMD)8P			
< TRIMMER >					
CT201	1-141-423-61	CAP, ADJ 20PF (AFC)			
< DIODE >					
D201	8-719-041-39	DIODE KV1470TL00			
D421	8-719-027-95	DIODE HSM88WK-TL			

Ref. No.	Part No.	Description	Remark
D422	8-719-055-86	DIODE KV1470TL1-3	
D423	8-719-027-95	DIODE HSM88WK-TL	
D424	8-719-055-86	DIODE KV1470TL1-3	
D425	8-719-055-86	DIODE KV1470TL1-3	
D501	8-719-404-50	DIODE MA111-TX	
D503	8-719-421-27	DIODE MA728-TX	
D504	8-719-404-50	DIODE MA111-TX	
D901	8-719-404-50	DIODE MA111-TX	
D902	8-719-055-86	DIODE KV1470TL1-3	
D903	8-719-404-50	DIODE MA111-TX	
D910	8-719-404-50	DIODE MA111-TX	
< FERRITE BEAD >			
FB401	1-543-955-22	FERRITE	OUH
FB402	1-543-955-22	FERRITE	OUH
< FILTER >			
FL101	1-233-345-21	FILTER, LOW PASS (5.5MHz)	
FL102	1-233-345-21	FILTER, LOW PASS (5.5MHz)	
FL103	1-233-345-21	FILTER, LOW PASS (5.5MHz)	
< IC >			
IC009	8-759-338-78	IC BA10324AFV-E2	
IC010	8-759-338-78	IC BA10324AFV-E2	
IC011	8-759-338-78	IC BA10324AFV-E2	
IC012	8-759-338-78	IC BA10324AFV-E2	
IC013	8-759-510-71	IC BA10358F-E2	
IC014	8-759-359-51	IC NJM431M(TE2)	
IC015	8-752-352-09	IC CXD2300Q-T4	
IC016	8-752-352-09	IC CXD2300Q-T4	
IC017	8-752-352-09	IC CXD2300Q-T4	
IC018	8-759-523-03	IC TC74HC4066AFT(EL)	
IC019	8-759-447-75	IC S-81322HG-KW-T1	
IC200	8-752-380-04	IC CXD3100R	
IC205	8-759-343-09	IC CXD2193AR-ER	
IC206	8-759-058-62	IC TC7S08FU(TE85R)	
IC207	8-759-368-81	IC TK11630UTL	
IC209	8-759-523-97	IC TC74VHC123AFT(EL)	
IC210	8-759-485-79	IC TC7SET08FU(TE85R)	
IC211	8-759-239-58	IC TC74HC221AF(EL)	
IC212	8-759-082-55	IC TC7W00FU(TE12R)	
IC213	8-759-523-02	IC TC74HC4053AFT(EL)	
IC214	8-759-491-31	IC TC74VHCT00AF(EL)	
IC401	8-752-380-73	IC CXD3103R	
IC402	8-759-328-28	IC ZA4024	
IC403	8-759-328-28	IC ZA4024	
IC410	8-759-433-17	IC uPD482445LG4-B10-9MH-E2-HDC	
IC411	8-759-525-63	IC uPD82094GD-001-LKL	
IC421	8-752-884-57	IC CXP912032-074R-T6	
IC422	8-752-378-75	IC CXD3106R	
IC501	8-759-537-46	IC S579174PZ-TEB	
IC502	8-759-445-93	IC AK6440AM-E2	
IC503	8-759-058-58	IC TC7S04FU(TE85R)	
IC504	8-759-427-85	IC MB88146APFV-G-BND-ER	
IC510	8-759-431-95	IC S-81230SGUP-DQB-T1	
IC511	8-759-512-69	IC S-81350HG-KD-T1	
IC701	8-759-430-56	IC CXD2194AR	
IC702	8-759-432-00	IC TSB11LV01PT-TEB	
IC703	8-759-465-99	IC HD6433837TB55X	
IC801	8-752-352-30	IC CXD2705AQ	

Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
IC802	8-759-530-57	IC TLV431ACDBV2		< TRANSISTOR >			
IC804	8-759-465-80	IC TC74ACT08FS(EL)		Q026	8-729-905-35	TRANSISTOR 2SC4081T106R	
IC805	8-752-379-31	IC CXD3107R		Q027	8-729-905-35	TRANSISTOR 2SC4081T106R	
IC807	8-759-475-36	IC TC74LCX08FT(EL)		Q028	8-729-905-35	TRANSISTOR 2SC4081T106R	
IC831	8-759-358-47	IC NJM2115V(Te2)		Q029	8-729-202-38	TRANSISTOR 2SC3326N-TE85L-B	
IC832	8-759-358-47	IC NJM2115V(Te2)		Q030	8-729-202-38	TRANSISTOR 2SC3326N-TE85L-B	
IC833	8-759-358-47	IC NJM2115V(Te2)		Q031	8-729-202-38	TRANSISTOR 2SC3326N-TE85L-B	
IC835	8-759-358-47	IC NJM2115V(Te2)		Q032	8-729-026-52	TRANSISTOR 2SA1576A-T106-R	
IC836	8-759-358-47	IC NJM2115V(Te2)		Q033	8-729-026-52	TRANSISTOR 2SA1576A-T106-R	
IC837	8-759-471-38	IC AK4520A-VF-E2		Q034	8-729-026-52	TRANSISTOR 2SA1576A-T106-R	
IC838	8-759-357-67	IC TK15125MTL		Q035	8-729-905-35	TRANSISTOR 2SC4081T106R	
IC840	8-759-358-47	IC NJM2115V(Te2)		Q036	8-729-905-35	TRANSISTOR 2SC4081T106R	
IC841	8-759-494-88	IC TC75S56F(Te85R)		Q037	8-729-905-35	TRANSISTOR 2SC4081T106R	
IC901	8-759-523-97	IC TC74VHC123AFT(EL)		Q039	8-729-026-52	TRANSISTOR 2SA1576A-T106-R	
IC902	8-759-523-95	IC TC74VHC74FT(EL)		Q040	8-729-905-35	TRANSISTOR 2SC4081T106R	
IC903	8-759-083-94	IC TC7W74FU(Te12R)		Q041	8-729-026-52	TRANSISTOR 2SA1576A-T106-R	
IC904	8-759-429-28	IC CXD8630R		Q042	8-729-905-35	TRANSISTOR 2SC4081T106R	
IC906	8-759-523-97	IC TC74VHC123AFT(EL)		Q043	8-729-026-52	TRANSISTOR 2SA1576A-T106-R	
IC907	8-759-195-81	IC TC7S86FU(Te85R)		Q044	8-729-905-35	TRANSISTOR 2SC4081T106R	
IC908	8-759-082-58	IC TC7W08FU(Te12R)		Q045	8-729-026-52	TRANSISTOR 2SA1576A-T106-R	
IC909	8-759-523-95	IC TC74VHC74FT(EL)		Q048	8-729-402-42	TRANSISTOR UN5213-TX	
IC911	8-759-327-04	IC CXD2913Q		Q050	8-729-905-35	TRANSISTOR 2SC4081T106R	
IC914	8-759-485-40	IC TLV2231CDBV2		Q051	8-729-427-83	TRANSISTOR XP6501-TXE	
IC915	8-759-082-61	IC TC4W53FU(Te12R)		Q052	8-729-905-35	TRANSISTOR 2SC4081T106R	
IC916	8-759-058-62	IC TC7S08FU(Te85R)		Q053	8-729-427-83	TRANSISTOR XP6501-TXE	
< COIL >				Q200	8-729-905-35	TRANSISTOR 2SC4081T106R	
L011	1-414-398-11	INDUCTOR 10uH		Q201	8-729-026-52	TRANSISTOR 2SA1576A-T106-R	
L012	1-414-398-11	INDUCTOR 10uH		Q501	8-729-905-35	TRANSISTOR 2SC4081T106R	
L013	1-414-398-11	INDUCTOR 10uH		Q502	8-729-905-35	TRANSISTOR 2SC4081T106R	
L014	1-414-398-11	INDUCTOR 10uH		Q504	8-729-403-35	TRANSISTOR UN5113-TX	
L015	1-414-398-11	INDUCTOR 10uH		Q505	8-729-427-70	TRANSISTOR XP4401-TXE	
L016	1-414-398-11	INDUCTOR 10uH		Q506	8-729-101-07	TRANSISTOR 2SB798-T1-DL DK	
L017	1-414-398-11	INDUCTOR 10uH		Q801	8-729-905-35	TRANSISTOR 2SC4081T106R	
L018	1-414-398-11	INDUCTOR 10uH		Q832	8-729-015-74	TRANSISTOR UN5111-TX	
L102	1-414-398-11	INDUCTOR 10uH		Q902	8-729-905-35	TRANSISTOR 2SC4081T106R	
L200	1-414-398-11	INDUCTOR 10uH		Q903	8-729-402-42	TRANSISTOR UN5213-TX	
L202	1-410-390-11	INDUCTOR CHIP 56uH		Q910	8-729-015-76	TRANSISTOR UN5211-TX	
L203	1-414-398-11	INDUCTOR 10uH		Q911	8-729-015-76	TRANSISTOR UN5211-TX	
L204	1-414-398-11	INDUCTOR 10uH		< RESISTOR >			
L205	1-411-275-21	COIL, VARIABLE		R002	1-216-864-11	METAL CHIP 0 5% 1/16W	
L206	1-410-655-31	INDUCTOR CHIP 120uH		R003	1-414-760-21	FERRITE 0UH	
L401	1-414-398-11	INDUCTOR 10uH		R004	1-414-760-21	FERRITE 0UH	
L402	1-414-398-11	INDUCTOR 10uH		R005	1-414-760-21	FERRITE 0UH	
L421	1-410-740-31	INDUCTOR CHIP 0.82uH		R009	1-414-760-21	FERRITE 0UH	
L422	1-410-378-11	INDUCTOR CHIP 5.6uH		R010	1-216-864-11	METAL CHIP 0 5% 1/16W	
L423	1-414-398-11	INDUCTOR 10uH		R012	1-216-864-11	METAL CHIP 0 5% 1/16W	
L424	1-410-385-11	INDUCTOR CHIP 22uH		R013	1-216-864-11	METAL CHIP 0 5% 1/16W	
L501	1-414-398-11	INDUCTOR 10uH		R014	1-216-864-11	METAL CHIP 0 5% 1/16W	
L701	1-410-377-31	INDUCTOR CHIP 4.7uH		R015	1-216-864-11	METAL CHIP 0 5% 1/16W	
L702	1-414-398-11	INDUCTOR 10uH		R016	1-216-864-11	METAL CHIP 0 5% 1/16W	
L703	1-410-393-11	INDUCTOR CHIP 100uH		R017	1-414-760-21	FERRITE 0UH	
L801	1-410-369-11	INDUCTOR CHIP 1uH		R018	1-414-760-21	FERRITE 0UH	
L802	1-410-381-11	INDUCTOR CHIP 10uH		R020	1-414-760-21	FERRITE 0UH	
L901	1-414-398-11	INDUCTOR 10uH		R021	1-414-760-21	FERRITE 0UH	
L904	1-414-398-11	INDUCTOR 10uH		R023	1-216-864-11	METAL CHIP 0 5% 1/16W	
L905	1-411-273-21	COIL, VARIABLE		R030	1-414-760-21	FERRITE 0UH	
L907	1-414-398-11	INDUCTOR 10uH		R033	1-216-864-11	METAL CHIP 0 5% 1/16W	
				R034	1-216-864-11	METAL CHIP 0 5% 1/16W	
				R036	1-216-864-11	METAL CHIP 0 5% 1/16W	

Ref. No.	Part No.	Description			Remark	Ref. No.	Part No.	Description			Remark
R037	1-216-864-11	METAL CHIP	0	5%	1/16W	R143	1-216-835-11	METAL CHIP	15K	5%	1/16W
R038	1-414-760-21	FERRITE	0UH			R145	1-216-821-11	METAL CHIP	1K	5%	1/16W
R039	1-216-864-11	METAL CHIP	0	5%	1/16W	R146	1-216-821-11	METAL CHIP	1K	5%	1/16W
R040	1-414-760-21	FERRITE	0UH			R147	1-216-821-11	METAL CHIP	1K	5%	1/16W
R041	1-414-760-21	FERRITE	0UH			R148	1-216-830-11	METAL CHIP	5.6K	5%	1/16W
R042	1-414-760-21	FERRITE	0UH			R149	1-216-824-11	METAL CHIP	1.8K	5%	1/16W
R043	1-216-864-11	METAL CHIP	0	5%	1/16W	R150	1-216-824-11	METAL CHIP	1.8K	5%	1/16W
R044	1-414-760-21	FERRITE	0UH			R151	1-216-824-11	METAL CHIP	1.8K	5%	1/16W
R045	1-216-864-11	METAL CHIP	0	5%	1/16W	R152	1-216-835-11	METAL CHIP	15K	5%	1/16W
R046	1-216-864-11	METAL CHIP	0	5%	1/16W	R154	1-216-809-11	METAL CHIP	100	5%	1/16W
R047	1-216-864-11	METAL CHIP	0	5%	1/16W	R155	1-216-809-11	METAL CHIP	100	5%	1/16W
R048	1-414-760-21	FERRITE	0UH			R156	1-216-809-11	METAL CHIP	100	5%	1/16W
R049	1-414-760-21	FERRITE	0UH			R157	1-216-864-11	METAL CHIP	0	5%	1/16W
R050	1-414-760-21	FERRITE	0UH			R159	1-216-805-11	METAL CHIP	47	5%	1/16W
R052	1-414-760-21	FERRITE	0UH			R160	1-216-821-11	METAL CHIP	1K	5%	1/16W
R053	1-414-760-21	FERRITE	0UH			R161	1-216-821-11	METAL CHIP	1K	5%	1/16W
R054	1-414-760-21	FERRITE	0UH			R162	1-216-823-11	METAL CHIP	1.5K	5%	1/16W
R055	1-414-760-21	FERRITE	0UH			R163	1-216-864-11	METAL CHIP	0	5%	1/16W
R056	1-414-760-21	FERRITE	0UH			R164	1-216-816-11	METAL CHIP	390	5%	1/16W
R057	1-414-760-21	FERRITE	0UH			R165	1-216-864-11	METAL CHIP	0	5%	1/16W
R059	1-216-837-11	METAL CHIP	22K	5%	1/16W	R166	1-216-829-11	METAL CHIP	4.7K	5%	1/16W
R060	1-216-818-11	METAL CHIP	560	5%	1/16W	R167	1-216-823-11	METAL CHIP	1.5K	5%	1/16W
R061	1-216-817-11	METAL CHIP	470	5%	1/16W	R168	1-216-835-11	METAL CHIP	15K	5%	1/16W
R062	1-216-821-11	METAL CHIP	1K	5%	1/16W	R169	1-216-832-11	METAL CHIP	8.2K	5%	1/16W
R063	1-216-825-11	METAL CHIP	2.2K	5%	1/16W	R170	1-216-864-11	METAL CHIP	0	5%	1/16W
R064	1-216-825-11	METAL CHIP	2.2K	5%	1/16W	R173	1-216-821-11	METAL CHIP	1K	5%	1/16W
R065	1-216-837-11	METAL CHIP	22K	5%	1/16W	R174	1-216-821-11	METAL CHIP	1K	5%	1/16W
R067	1-216-818-11	METAL CHIP	560	5%	1/16W	R175	1-216-813-11	METAL CHIP	220	5%	1/16W
R068	1-216-817-11	METAL CHIP	470	5%	1/16W	R176	1-216-821-11	METAL CHIP	1K	5%	1/16W
R069	1-216-825-11	METAL CHIP	2.2K	5%	1/16W	R177	1-216-821-11	METAL CHIP	1K	5%	1/16W
R070	1-216-825-11	METAL CHIP	2.2K	5%	1/16W	R178	1-216-817-11	METAL CHIP	470	5%	1/16W
R071	1-216-821-11	METAL CHIP	1K	5%	1/16W	R182	1-216-821-11	METAL CHIP	1K	5%	1/16W
R113	1-216-829-11	METAL CHIP	4.7K	5%	1/16W	R183	1-216-821-11	METAL CHIP	1K	5%	1/16W
R115	1-216-837-11	METAL CHIP	22K	5%	1/16W	R184	1-216-817-11	METAL CHIP	470	5%	1/16W
R116	1-216-837-11	METAL CHIP	22K	5%	1/16W	R185	1-216-821-11	METAL CHIP	1K	5%	1/16W
R117	1-216-837-11	METAL CHIP	22K	5%	1/16W	R186	1-216-821-11	METAL CHIP	1K	5%	1/16W
R118	1-216-821-11	METAL CHIP	1K	5%	1/16W	R187	1-216-817-11	METAL CHIP	470	5%	1/16W
R119	1-216-821-11	METAL CHIP	1K	5%	1/16W	R192	1-216-821-11	METAL CHIP	1K	5%	1/16W
R120	1-216-821-11	METAL CHIP	1K	5%	1/16W	R199	1-216-821-11	METAL CHIP	1K	5%	1/16W
R121	1-216-864-11	METAL CHIP	0	5%	1/16W	R201	1-216-821-11	METAL CHIP	1K	5%	1/16W
R122	1-216-864-11	METAL CHIP	0	5%	1/16W	R203	1-216-864-11	METAL CHIP	0	5%	1/16W
R123	1-216-864-11	METAL CHIP	0	5%	1/16W	R204	1-216-827-11	METAL CHIP	3.3K	5%	1/16W
R124	1-216-833-11	METAL CHIP	10K	5%	1/16W	R205	1-216-864-11	METAL CHIP	0	5%	1/16W
R125	1-216-833-11	METAL CHIP	10K	5%	1/16W	R206	1-216-864-11	METAL CHIP	0	5%	1/16W
R126	1-216-825-11	METAL CHIP	2.2K	5%	1/16W	R207	1-216-864-11	METAL CHIP	0	5%	1/16W
R127	1-216-832-11	METAL CHIP	8.2K	5%	1/16W	R208	1-216-827-11	METAL CHIP	3.3K	5%	1/16W
R128	1-216-809-11	METAL CHIP	100	5%	1/16W	R209	1-216-864-11	METAL CHIP	0	5%	1/16W
R129	1-216-809-11	METAL CHIP	100	5%	1/16W	R210	1-216-864-11	METAL CHIP	0	5%	1/16W
R130	1-216-809-11	METAL CHIP	100	5%	1/16W	R211	1-216-833-11	METAL CHIP	10K	5%	1/16W
R131	1-216-827-11	METAL CHIP	3.3K	5%	1/16W	R212	1-216-864-11	METAL CHIP	0	5%	1/16W
R133	1-216-829-11	METAL CHIP	4.7K	5%	1/16W	R213	1-216-825-11	METAL CHIP	2.2K	5%	1/16W
R134	1-216-829-11	METAL CHIP	4.7K	5%	1/16W	R214	1-216-833-11	METAL CHIP	10K	5%	1/16W
R135	1-216-829-11	METAL CHIP	4.7K	5%	1/16W	R215	1-216-840-11	METAL CHIP	39K	5%	1/16W
R136	1-216-830-11	METAL CHIP	5.6K	5%	1/16W	R216	1-216-864-11	METAL CHIP	0	5%	1/16W
R137	1-216-833-11	METAL CHIP	10K	5%	1/16W	R217	1-216-828-11	METAL CHIP	3.9K	5%	1/16W
R138	1-216-833-11	METAL CHIP	10K	5%	1/16W	R218	1-216-864-11	METAL CHIP	0	5%	1/16W
R139	1-216-821-11	METAL CHIP	1K	5%	1/16W	R219	1-216-864-11	METAL CHIP	0	5%	1/16W
R140	1-216-829-11	METAL CHIP	4.7K	5%	1/16W	R246	1-216-864-11	METAL CHIP	0	5%	1/16W
R141	1-216-829-11	METAL CHIP	4.7K	5%	1/16W	R247	1-216-821-11	METAL CHIP	1K	5%	1/16W
R142	1-216-821-11	METAL CHIP	1K	5%	1/16W	R248	1-216-817-11	METAL CHIP	470	5%	1/16W

Ref. No.	Part No.	Description			Remark	Ref. No.	Part No.	Description			Remark
R249	1-216-817-11	METAL CHIP	470	5%	1/16W	R425	1-216-833-11	METAL CHIP	10K	5%	1/16W
R250	1-216-821-11	METAL CHIP	1K	5%	1/16W	R426	1-216-821-11	METAL CHIP	1K	5%	1/16W
R256	1-216-833-11	METAL CHIP	10K	5%	1/16W	R427	1-216-833-11	METAL CHIP	10K	5%	1/16W
R259	1-216-832-11	METAL CHIP	8.2K	5%	1/16W	R428	1-216-829-11	METAL CHIP	4.7K	5%	1/16W
R260	1-216-829-11	METAL CHIP	4.7K	5%	1/16W	R429	1-216-845-11	METAL CHIP	100K	5%	1/16W
R261	1-216-814-11	METAL CHIP	270	5%	1/16W	R430	1-216-805-11	METAL CHIP	47	5%	1/16W
R262	1-216-829-11	METAL CHIP	4.7K	5%	1/16W	R431	1-216-817-11	METAL CHIP	470	5%	1/16W
R264	1-216-833-11	METAL CHIP	10K	5%	1/16W	R432	1-216-845-11	METAL CHIP	100K	5%	1/16W
R266	1-216-833-11	METAL CHIP	10K	5%	1/16W	R433	1-216-845-11	METAL CHIP	100K	5%	1/16W
R268	1-216-829-11	METAL CHIP	4.7K	5%	1/16W	R434	1-216-805-11	METAL CHIP	47	5%	1/16W
R269	1-216-814-11	METAL CHIP	270	5%	1/16W	R435	1-216-845-11	METAL CHIP	100K	5%	1/16W
R270	1-216-829-11	METAL CHIP	4.7K	5%	1/16W	R437	1-216-864-11	METAL CHIP	0	5%	1/16W
R271	1-216-864-11	METAL CHIP	0	5%	1/16W	R438	1-216-864-11	METAL CHIP	0	5%	1/16W
R272	1-216-855-11	METAL CHIP	680K	5%	1/16W	R439	1-216-864-11	METAL CHIP	0	5%	1/16W
R273	1-216-839-11	METAL CHIP	33K	5%	1/16W	R440	1-216-833-11	METAL CHIP	10K	5%	1/16W
R274	1-216-864-11	METAL CHIP	0	5%	1/16W	R441	1-216-833-11	METAL CHIP	10K	5%	1/16W
R276	1-216-833-11	METAL CHIP	10K	5%	1/16W	R442	1-216-815-11	METAL CHIP	330	5%	1/16W
R277	1-216-839-11	METAL CHIP	33K	5%	1/16W	R443	1-216-805-11	METAL CHIP	47	5%	1/16W
R278	1-216-864-11	METAL CHIP	0	5%	1/16W	R444	1-216-829-11	METAL CHIP	4.7K	5%	1/16W
R279	1-216-839-11	METAL CHIP	33K	5%	1/16W	R445	1-216-829-11	METAL CHIP	4.7K	5%	1/16W
R280	1-216-833-11	METAL CHIP	10K	5%	1/16W	R446	1-216-845-11	METAL CHIP	100K	5%	1/16W
R281	1-216-821-11	METAL CHIP	1K	5%	1/16W	R447	1-216-845-11	METAL CHIP	100K	5%	1/16W
R282	1-216-839-11	METAL CHIP	33K	5%	1/16W	R448	1-216-845-11	METAL CHIP	100K	5%	1/16W
R285	1-216-864-11	METAL CHIP	0	5%	1/16W	R449	1-216-821-11	METAL CHIP	1K	5%	1/16W
R286	1-216-833-11	METAL CHIP	10K	5%	1/16W	R450	1-216-857-11	METAL CHIP	1M	5%	1/16W
R288	1-216-833-11	METAL CHIP	10K	5%	1/16W	R451	1-216-845-11	METAL CHIP	100K	5%	1/16W
R292	1-216-833-11	METAL CHIP	10K	5%	1/16W	R452	1-216-845-11	METAL CHIP	100K	5%	1/16W
R295	1-216-864-11	METAL CHIP	0	5%	1/16W	R453	1-216-845-11	METAL CHIP	100K	5%	1/16W
R297	1-216-864-11	METAL CHIP	0	5%	1/16W	R454	1-216-845-11	METAL CHIP	100K	5%	1/16W
R298	1-216-864-11	METAL CHIP	0	5%	1/16W	R455	1-216-845-11	METAL CHIP	100K	5%	1/16W
R299	1-216-825-11	METAL CHIP	2.2K	5%	1/16W	R456	1-216-845-11	METAL CHIP	100K	5%	1/16W
R300	1-216-825-11	METAL CHIP	2.2K	5%	1/16W	R457	1-216-845-11	METAL CHIP	100K	5%	1/16W
R301	1-216-825-11	METAL CHIP	2.2K	5%	1/16W	R458	1-216-845-11	METAL CHIP	100K	5%	1/16W
R302	1-216-825-11	METAL CHIP	2.2K	5%	1/16W	R459	1-216-845-11	METAL CHIP	100K	5%	1/16W
R303	1-216-821-11	METAL CHIP	1K	5%	1/16W	R460	1-216-845-11	METAL CHIP	100K	5%	1/16W
R304	1-216-815-11	METAL CHIP	330	5%	1/16W	R461	1-216-864-11	METAL CHIP	0	5%	1/16W
R313	1-216-827-11	METAL CHIP	3.3K	5%	1/16W	R462	1-216-864-11	METAL CHIP	0	5%	1/16W
R314	1-216-815-11	METAL CHIP	330	5%	1/16W	R463	1-216-864-11	METAL CHIP	0	5%	1/16W
R315	1-216-815-11	METAL CHIP	330	5%	1/16W	R464	1-216-864-11	METAL CHIP	0	5%	1/16W
R318	1-216-295-91	SHORT	0			R465	1-216-864-11	METAL CHIP	0	5%	1/16W
R319	1-218-864-11	RES,CHIP	5.1K	0.50%	1/16W (DSR-40)	R466	1-216-864-11	METAL CHIP	0	5%	1/16W
R319	1-218-865-11	RES,CHIP	5.6K	0.50%	1/16W (DSR-40P)	R467	1-216-864-11	METAL CHIP	0	5%	1/16W
R320	1-218-831-11	RES,CHIP	220	0.50%	1/16W	R468	1-216-864-11	METAL CHIP	0	5%	1/16W
R321	1-218-851-11	RES,CHIP	1.5K	0.50%	1/16W	R469	1-216-821-11	METAL CHIP	1K	5%	1/16W
R322	1-218-831-11	RES,CHIP	220	0.50%	1/16W	R470	1-216-821-11	METAL CHIP	1K	5%	1/16W
R339	1-216-864-11	METAL CHIP	0	5%	1/16W	R471	1-216-821-11	METAL CHIP	1K	5%	1/16W
R340	1-216-841-11	METAL CHIP	47K	5%	1/16W	R472	1-216-821-11	METAL CHIP	1K	5%	1/16W
R341	1-216-841-11	METAL CHIP	47K	5%	1/16W	R502	1-216-809-11	METAL CHIP	100	5%	1/16W
R342	1-216-864-11	METAL CHIP	0	5%	1/16W	R503	1-216-809-11	METAL CHIP	100	5%	1/16W
R343	1-216-840-11	METAL CHIP	39K	5%	1/16W	R504	1-216-864-11	METAL CHIP	0	5%	1/16W
R344	1-216-821-11	METAL CHIP	1K	5%	1/16W	R505	1-216-809-11	METAL CHIP	100	5%	1/16W
R345	1-216-821-11	METAL CHIP	1K	5%	1/16W	R506	1-216-864-11	METAL CHIP	0	5%	1/16W
R346	1-216-833-11	METAL CHIP	10K	5%	1/16W	R507	1-216-809-11	METAL CHIP	100	5%	1/16W
R347	1-218-871-11	RES,CHIP	10K	0.50%	1/16W	R508	1-216-864-11	METAL CHIP	0	5%	1/16W
R401	1-216-821-11	METAL CHIP	1K	5%	1/16W	R509	1-216-833-11	METAL CHIP	10K	5%	1/16W
R422	1-216-805-11	METAL CHIP	47	5%	1/16W	R510	1-216-864-11	METAL CHIP	0	5%	1/16W
R423	1-216-805-11	METAL CHIP	47	5%	1/16W	R511	1-216-833-11	METAL CHIP	10K	5%	1/16W
R424	1-216-805-11	METAL CHIP	47	5%	1/16W	R512	1-216-809-11	METAL CHIP	100	5%	1/16W
						R513	1-216-809-11	METAL CHIP	100	5%	1/16W
						R514	1-216-809-11	METAL CHIP	100	5%	1/16W

Ref. No.	Part No.	Description			Remark	Ref. No.	Part No.	Description			Remark
R515	1-216-809-11	METAL CHIP	100	5%	1/16W	R585	1-216-841-11	METAL CHIP	47K	5%	1/16W
R517	1-216-809-11	METAL CHIP	100	5%	1/16W	R586	1-216-837-11	METAL CHIP	22K	5%	1/16W
R518	1-216-809-11	METAL CHIP	100	5%	1/16W	R587	1-216-837-11	METAL CHIP	22K	5%	1/16W
R524	1-216-841-11	METAL CHIP	47K	5%	1/16W	R701	1-216-833-11	METAL CHIP	10K	5%	1/16W
R526	1-216-841-11	METAL CHIP	47K	5%	1/16W	R702	1-216-821-11	METAL CHIP	1K	5%	1/16W
R529	1-216-827-11	METAL CHIP	3.3K	5%	1/16W	R703	1-216-857-11	METAL CHIP	1M	5%	1/16W
R530	1-216-827-11	METAL CHIP	3.3K	5%	1/16W	R704	1-216-833-11	METAL CHIP	10K	5%	1/16W
R531	1-216-809-11	METAL CHIP	100	5%	1/16W	R705	1-216-833-11	METAL CHIP	10K	5%	1/16W
R532	1-216-827-11	METAL CHIP	3.3K	5%	1/16W	R706	1-216-821-11	METAL CHIP	1K	5%	1/16W
R533	1-216-809-11	METAL CHIP	100	5%	1/16W	R707	1-216-845-11	METAL CHIP	100K	5%	1/16W
R534	1-216-823-11	METAL CHIP	1.5K	5%	1/16W	R708	1-216-864-11	METAL CHIP	0	5%	1/16W
R535	1-216-830-11	METAL CHIP	5.6K	5%	1/16W	R709	1-216-845-11	METAL CHIP	100K	5%	1/16W
R536	1-216-829-11	METAL CHIP	4.7K	5%	1/16W	R710	1-216-845-11	METAL CHIP	100K	5%	1/16W
R537	1-216-841-11	METAL CHIP	47K	5%	1/16W	R711	1-216-833-11	METAL CHIP	10K	5%	1/16W
R538	1-216-841-11	METAL CHIP	47K	5%	1/16W	R712	1-216-833-11	METAL CHIP	10K	5%	1/16W
R539	1-216-841-11	METAL CHIP	47K	5%	1/16W	R713	1-216-845-11	METAL CHIP	100K	5%	1/16W
R540	1-216-841-11	METAL CHIP	47K	5%	1/16W	R714	1-216-833-11	METAL CHIP	10K	5%	1/16W
R541	1-216-841-11	METAL CHIP	47K	5%	1/16W	R715	1-216-845-11	METAL CHIP	100K	5%	1/16W
R542	1-216-841-11	METAL CHIP	47K	5%	1/16W	R717	1-218-873-11	RES,CHIP	12K	0.50%	1/16W
R543	1-216-821-11	METAL CHIP	1K	5%	1/16W	R718	1-218-873-11	RES,CHIP	12K	0.50%	1/16W
R544	1-216-821-11	METAL CHIP	1K	5%	1/16W	R719	1-216-864-11	METAL CHIP	0	5%	1/16W
R545	1-216-821-11	METAL CHIP	1K	5%	1/16W	R720	1-218-871-11	RES,CHIP	10K	0.50%	1/16W
R546	1-216-791-11	METAL CHIP	3.3	5%	1/16W	R721	1-218-871-11	RES,CHIP	10K	0.50%	1/16W
R547	1-216-825-11	METAL CHIP	2.2K	5%	1/16W	R722	1-216-806-11	RES,CHIP	56	5%	1/16W
R548	1-216-821-11	METAL CHIP	1K	5%	1/16W	R723	1-216-806-11	RES,CHIP	56	5%	1/16W
R549	1-216-821-11	METAL CHIP	1K	5%	1/16W	R724	1-216-806-11	RES,CHIP	56	5%	1/16W
R550	1-216-841-11	METAL CHIP	47K	5%	1/16W	R725	1-216-806-11	RES,CHIP	56	5%	1/16W
R551	1-216-821-11	METAL CHIP	1K	5%	1/16W	R726	1-216-845-11	METAL CHIP	100K	5%	1/16W
R553	1-216-797-11	METAL CHIP	10	5%	1/16W	R727	1-216-864-11	METAL CHIP	0	5%	1/16W
R554	1-216-797-11	METAL CHIP	10	5%	1/16W	R801	1-216-833-11	METAL CHIP	10K	5%	1/16W
R555	1-216-833-11	METAL CHIP	10K	5%	1/16W	R802	1-216-845-11	METAL CHIP	100K	5%	1/16W
R556	1-216-833-11	METAL CHIP	10K	5%	1/16W	R803	1-216-809-11	METAL CHIP	100	5%	1/16W
R557	1-216-833-11	METAL CHIP	10K	5%	1/16W	R813	1-216-837-11	METAL CHIP	22K	5%	1/16W
R558	1-216-821-11	METAL CHIP	1K	5%	1/16W	R814	1-216-142-00	RES,CHIP	4.7	5%	1/8W
R559	1-216-821-11	METAL CHIP	1K	5%	1/16W	R818	1-216-845-11	METAL CHIP	100K	5%	1/16W
R560	1-216-821-11	METAL CHIP	1K	5%	1/16W	R819	1-216-837-11	METAL CHIP	22K	5%	1/16W
R561	1-216-821-11	METAL CHIP	1K	5%	1/16W	R821	1-216-829-11	METAL CHIP	4.7K	5%	1/16W
R562	1-216-821-11	METAL CHIP	1K	5%	1/16W	R822	1-216-845-11	METAL CHIP	100K	5%	1/16W
R563	1-216-821-11	METAL CHIP	1K	5%	1/16W	R823	1-216-845-11	METAL CHIP	100K	5%	1/16W
R564	1-219-570-11	RES,CHIP	10M	5%	1/16W	R824	1-216-845-11	METAL CHIP	100K	5%	1/16W
R565	1-216-864-11	METAL CHIP	0	5%	1/16W	R826	1-216-864-11	METAL CHIP	0	5%	1/16W
R566	1-216-821-11	METAL CHIP	1K	5%	1/16W	R829	1-216-864-11	METAL CHIP	0	5%	1/16W
R567	1-216-821-11	METAL CHIP	1K	5%	1/16W	R830	1-216-833-11	METAL CHIP	10K	5%	1/16W
R568	1-216-821-11	METAL CHIP	1K	5%	1/16W	R831	1-216-829-11	METAL CHIP	4.7K	5%	1/16W
R569	1-216-821-11	METAL CHIP	1K	5%	1/16W	R832	1-216-829-11	METAL CHIP	4.7K	5%	1/16W
R570	1-216-841-11	METAL CHIP	47K	5%	1/16W	R833	1-216-833-11	METAL CHIP	10K	5%	1/16W
R571	1-216-841-11	METAL CHIP	47K	5%	1/16W	R834	1-216-833-11	METAL CHIP	10K	5%	1/16W
R572	1-216-845-11	METAL CHIP	100K	5%	1/16W	R835	1-216-829-11	METAL CHIP	4.7K	5%	1/16W
R573	1-216-821-11	METAL CHIP	1K	5%	1/16W	R836	1-216-829-11	METAL CHIP	4.7K	5%	1/16W
R574	1-216-797-11	METAL CHIP	10	5%	1/16W	R837	1-216-830-11	METAL CHIP	5.6K	5%	1/16W
R575	1-216-821-11	METAL CHIP	1K	5%	1/16W	R838	1-216-809-11	METAL CHIP	100	5%	1/16W
R576	1-216-797-11	METAL CHIP	10	5%	1/16W	R839	1-216-830-11	METAL CHIP	5.6K	5%	1/16W
R577	1-216-797-11	METAL CHIP	10	5%	1/16W	R840	1-216-830-11	METAL CHIP	5.6K	5%	1/16W
R578	1-216-821-11	METAL CHIP	1K	5%	1/16W	R841	1-216-809-11	METAL CHIP	100	5%	1/16W
R579	1-216-841-11	METAL CHIP	47K	5%	1/16W	R842	1-216-830-11	METAL CHIP	5.6K	5%	1/16W
R580	1-216-833-11	METAL CHIP	10K	5%	1/16W	R843	1-216-809-11	METAL CHIP	100	5%	1/16W
R581	1-216-841-11	METAL CHIP	47K	5%	1/16W	R844	1-216-833-11	METAL CHIP	10K	5%	1/16W
R582	1-216-841-11	METAL CHIP	47K	5%	1/16W	R845	1-216-809-11	METAL CHIP	100	5%	1/16W
R583	1-216-841-11	METAL CHIP	47K	5%	1/16W	R847	1-216-833-11	METAL CHIP	10K	5%	1/16W
R584	1-216-841-11	METAL CHIP	47K	5%	1/16W	R850	1-218-870-11	RES,CHIP	9.1K	0.50%	1/16W



Ref. No.	Part No.	Description	Remark
R852	1-216-809-11	METAL CHIP	100 5% 1/16W
R853	1-216-833-11	METAL CHIP	10K 5% 1/16W
R854	1-216-833-11	METAL CHIP	10K 5% 1/16W
R855	1-218-870-11	RES,CHIP	9.1K 0.50% 1/16W
R856	1-216-829-11	METAL CHIP	4.7K 5% 1/16W
R857	1-216-809-11	METAL CHIP	100 5% 1/16W
R858	1-218-707-11	RES,CHIP	4.3K 5% 1/16W
R859	1-216-809-11	METAL CHIP	100 5% 1/16W
R860	1-218-707-11	RES,CHIP	4.3K 5% 1/16W
R861	1-216-829-11	METAL CHIP	4.7K 5% 1/16W
R863	1-216-829-11	METAL CHIP	4.7K 5% 1/16W
R866	1-216-829-11	METAL CHIP	4.7K 5% 1/16W
R867	1-216-809-11	METAL CHIP	100 5% 1/16W
R868	1-216-829-11	METAL CHIP	4.7K 5% 1/16W
R869	1-216-829-11	METAL CHIP	4.7K 5% 1/16W
R870	1-216-829-11	METAL CHIP	4.7K 5% 1/16W
R871	1-216-829-11	METAL CHIP	4.7K 5% 1/16W
R872	1-216-829-11	METAL CHIP	4.7K 5% 1/16W
R873	1-216-829-11	METAL CHIP	4.7K 5% 1/16W
R875	1-218-839-11	RES,CHIP	470 0.50% 1/16W
R876	1-218-839-11	RES,CHIP	470 0.50% 1/16W
R877	1-218-839-11	RES,CHIP	470 0.50% 1/16W
R878	1-218-839-11	RES,CHIP	470 0.50% 1/16W
R879	1-216-864-11	METAL CHIP	0 5% 1/16W
R880	1-216-815-11	METAL CHIP	330 5% 1/16W
R881	1-216-815-11	METAL CHIP	330 5% 1/16W
R885	1-216-829-11	METAL CHIP	4.7K 5% 1/16W
R886	1-216-829-11	METAL CHIP	4.7K 5% 1/16W
R887	1-216-833-11	METAL CHIP	10K 5% 1/16W
R888	1-216-827-11	METAL CHIP	3.3K 5% 1/16W
R889	1-216-830-11	METAL CHIP	5.6K 5% 1/16W
R890	1-216-849-11	METAL CHIP	220K 5% 1/16W
R891	1-208-813-11	RES,CHIP	20K 0.50% 1/10W
R893	1-216-833-11	METAL CHIP	10K 5% 1/16W
R894	1-216-809-11	METAL CHIP	100 5% 1/16W
R895	1-216-833-11	METAL CHIP	10K 5% 1/16W
R896	1-216-809-11	METAL CHIP	100 5% 1/16W
R897	1-208-813-11	RES,CHIP	20K 0.50% 1/10W
R899	1-216-864-11	METAL CHIP	0 5% 1/16W
R903	1-216-864-11	METAL CHIP	0 5% 1/16W
R904	1-216-838-11	METAL CHIP	27K 5% 1/16W
R905	1-216-821-11	METAL CHIP	1K 5% 1/16W
R906	1-218-883-11	RES,CHIP	33K 0.50% 1/16W
R907	1-216-821-11	METAL CHIP	1K 5% 1/16W
R908	1-216-864-11	METAL CHIP	0 5% 1/16W
R909	1-216-864-11	METAL CHIP	0 5% 1/16W
R913	1-216-821-11	METAL CHIP	1K 5% 1/16W
R918	1-216-821-11	METAL CHIP	1K 5% 1/16W
R919	1-216-864-11	METAL CHIP	0 5% 1/16W
R920	1-218-871-11	RES,CHIP	10K 0.50% 1/16W
R921	1-218-875-11	RES,CHIP	15K 0.50% 1/16W
R923	1-216-178-00	RES,CHIP	150 5% 1/8W
R924	1-216-831-11	METAL CHIP	6.8K 5% 1/16W
R926	1-216-857-11	METAL CHIP	1M 5% 1/16W
R936	1-216-845-11	METAL CHIP	100K 5% 1/16W
R937	1-216-845-11	METAL CHIP	100K 5% 1/16W
R938	1-216-847-11	METAL CHIP	150K 5% 1/16W
R939	1-216-833-11	METAL CHIP	10K 5% 1/16W
R941	1-216-864-11	METAL CHIP	0 5% 1/16W
R943	1-216-864-11	METAL CHIP	0 5% 1/16W

Ref. No.	Part No.	Description	Remark
R944	1-216-833-11	METAL CHIP	10K 5% 1/16W
R950	1-216-821-11	METAL CHIP	1K 5% 1/16W
R951	1-216-821-11	METAL CHIP	1K 5% 1/16W
R952	1-216-821-11	METAL CHIP	1K 5% 1/16W
R953	1-216-821-11	METAL CHIP	1K 5% 1/16W
R954	1-216-821-11	METAL CHIP	1K 5% 1/16W
R955	1-216-821-11	METAL CHIP	1K 5% 1/16W
R956	1-216-821-11	METAL CHIP	1K 5% 1/16W
R957	1-216-842-11	METAL CHIP	56K 5% 1/16W
R958	1-216-845-11	METAL CHIP	100K 5% 1/16W
R959	1-216-833-11	METAL CHIP	10K 5% 1/16W
R960	1-216-841-11	METAL CHIP	47K 5% 1/16W
R962	1-216-821-11	METAL CHIP	1K 5% 1/16W
R964	1-216-838-11	METAL CHIP	27K 5% 1/16W
R965	1-216-833-11	METAL CHIP	10K 5% 1/16W
R966	1-216-833-11	METAL CHIP	10K 5% 1/16W
R967	1-216-833-11	METAL CHIP	10K 5% 1/16W
R968	1-216-841-11	METAL CHIP	47K 5% 1/16W
R969	1-216-841-11	METAL CHIP	47K 5% 1/16W
R970	1-216-833-11	METAL CHIP	10K 5% 1/16W
R971	1-216-813-11	METAL CHIP	220 5% 1/16W
R972	1-216-841-11	METAL CHIP	47K 5% 1/16W
R973	1-216-864-11	METAL CHIP	0 5% 1/16W
R974	1-216-838-11	METAL CHIP	27K 5% 1/16W
R975	1-216-841-11	METAL CHIP	47K 5% 1/16W
R976	1-216-845-11	METAL CHIP	100K 5% 1/16W
R978	1-216-813-11	METAL CHIP	220 5% 1/16W
R980	1-216-841-11	METAL CHIP	47K 5% 1/16W
R981	1-216-821-11	METAL CHIP	1K 5% 1/16W
R982	1-216-833-11	METAL CHIP	10K 5% 1/16W
R983	1-216-821-11	METAL CHIP	1K 5% 1/16W
R984	1-216-833-11	METAL CHIP	10K 5% 1/16W
R986	1-216-864-11	METAL CHIP	0 5% 1/16W
R987	1-216-864-11	METAL CHIP	0 5% 1/16W
R988	1-216-864-11	METAL CHIP	0 5% 1/16W
R989	1-216-864-11	METAL CHIP	0 5% 1/16W
R990	1-216-813-11	METAL CHIP	220 5% 1/16W
R991	1-216-813-11	METAL CHIP	220 5% 1/16W
R992	1-216-864-11	METAL CHIP	0 5% 1/16W
RR001	1-216-864-11	METAL CHIP	0 5% 1/16W (DSR-40)
RR002	1-216-864-11	METAL CHIP	0 5% 1/16W (DSR-40P)
< VARIABLE RESISTOR >			
RV001	1-238-855-11	RES, ADJ, CERMET 4.7K(A/D CONV.REF REG1)	
RV002	1-238-855-11	RES, ADJ, CERMET 4.7K(A/D CONV.REF REG2)	
RV010	1-238-854-11	RES, ADJ, CERMET 2.2K(CR CLAMP REF REG)	
RV011	1-238-853-11	RES, ADJ, CERMET 1K(Y CLAMP REF REG)	
RV012	1-238-854-11	RES, ADJ, CERMET 2.2K(CB CLAMP REF REG)	
RV201	1-238-855-11	RES, ADJ, CERMET 4.7K (AFC PICTURE FRAME)	
< VIBRATOR >			
X421	1-760-655-21	VIBRATOR, CRYSTAL (20MHz)	
X422	1-767-449-11	VIBRATOR, CRYSTAL (27MHz)	
X501	1-767-450-11	VIBRATOR, CERAMIC (20MHz)	
X502	1-760-458-21	VIBRATOR, CRYSTAL (32.768kHz)	
X701	1-767-399-11	VIBRATOR, CRYSTAL (24.576MHz)	
X702	1-760-497-21	VIBRATOR, LITHIUM NIOBATE (6MHz)	

## JC-19

## MD-63

## MD-64

## MD-65

## POWER BLOCK (U-1)

Ref. No.	Part No.	Description	Remark
X801	1-767-779-21	VIBRATOR, CRYSTAL (49.152MHz)	

## MD-63 BOARD, COMPLETE

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(Ref No. 8,000 Series)

## &lt; CAPACITOR &gt;

C101	1-126-206-11	ELECT CHIP	100uF	20%	6.3V
C102	1-163-031-11	CERAMIC CHIP	0.01uF		50V

## &lt; CONNECTOR &gt;

CN101	1-770-646-11	CONNECTOR, FFC/FPC 16P	
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## &lt; DIODE &gt;

D101	8-719-989-52	DIODE GL4600S	
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## &lt; IC &gt;

IC101	8-719-820-44	IC PHOTO COUPLER TLP907-0 (SONY2)	
IC102	8-719-820-44	IC PHOTO COUPLER TLP907-0 (SONY2)	
IC103	8-759-510-71	IC BA10358F-E2	
IC105	8-719-821-03	IC ELEMENT, HALL THS117-TE85L	

## &lt; JUMPER RESISTOR &gt;

JR101	1-216-296-91	SHORT	0
JR102	1-216-296-91	SHORT	0
JR103	1-216-296-91	SHORT	0
JR104	1-216-296-91	SHORT	0
JR105	1-216-296-91	SHORT	0

## &lt; TRANSISTOR &gt;

Q102	8-729-012-46	PHOTO TRANSISTOR PT4600FS	
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## &lt; RESISTOR &gt;

R101	1-216-031-00	METAL CHIP	180	5%	1/10W
R102	1-216-081-00	METAL CHIP	22K	5%	1/10W
R103	1-216-069-00	METAL CHIP	6.8K	5%	1/10W
R107	1-216-069-00	METAL CHIP	6.8K	5%	1/10W
R108	1-216-047-91	RES, CHIP	820	5%	1/10W
R109	1-216-081-00	METAL CHIP	22K	5%	1/10W

## &lt; VARIABLE RESISTOR &gt;

RV101	1-238-858-11	RES, ADJ, CERMET 47K	
RV102	1-238-862-11	RES, ADJ, CERMET 1M	

## &lt; SWITCH &gt;

S101	1-572-719-11	SWITCH, PUSH (1 KEY)	
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## MD-64 BOARD, COMPLETE

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(Ref No. 8,000 Series)

## &lt; CAPACITOR &gt;

C001	1-126-206-11	ELECT CHIP	100uF	20%	6.3V
C002	1-163-031-11	CERAMIC CHIP	0.01uF		50V

Ref. No.	Part No.	Description	Remark
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## &lt; CONNECTOR &gt;

CN002	1-770-692-11	CONNECTOR, FFC/FPC 9P	
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## &lt; IC &gt;

IC003	8-719-820-44	IC PHOTO COUPLER TLP907-0 (SONY2)	
IC004	8-719-820-44	IC PHOTO COUPLER TLP907-0 (SONY2)	
IC005	8-759-510-71	IC BA10358F-E2	
IC006	8-719-821-03	IC ELEMENT, HALL THS117-TE85L	

## &lt; JUMPER RESISTOR &gt;

JR001	1-216-296-91	SHORT	0
JR002	1-216-296-91	SHORT	0

## &lt; TRANSISTOR &gt;

Q001	8-729-012-46	PHOTO TRANSISTOR PT4600FS	
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## &lt; RESISTOR &gt;

R002	1-216-031-00	METAL CHIP	180	5%	1/10W
R003	1-216-069-00	METAL CHIP	6.8K	5%	1/10W
R004	1-216-081-00	METAL CHIP	22K	5%	1/10W
R005	1-216-069-00	METAL CHIP	6.8K	5%	1/10W
R007	1-216-081-00	METAL CHIP	22K	5%	1/10W
R008	1-216-047-91	RES, CHIP	820	5%	1/10W

## &lt; VARIABLE RESISTOR &gt;

RV001	1-238-858-11	RES, ADJ, CERMET 47K	
RV002	1-238-862-11	RES, ADJ, CERMET 1M	

## &lt; SWITCH &gt;

S002	1-762-558-11	SWITCH, PUSH (C DOWN)	
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## MD-65 BOARD, COMPLETE

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(Ref No. 8,000 Series)

## &lt; CONNECTOR &gt;

CN201	1-766-830-21	CONNECTOR, FFC/FPC (ZIF) 11P	
CN202	1-774-771-11	CONNECTOR, FFC/FPC 14P	
CN203	1-564-001-11	PIN, CONNECTOR 2P	
CN204	1-750-620-11	CONNECTOR (MM8 MD)	

## &lt; JUMPER RESISTOR &gt;

JR201	1-216-296-91	SHORT	0
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△	1-468-377-11	POWER BLOCK (U-1) (DSR-40)	
△	1-468-378-11	POWER BLOCK (U-1) (DSR-40P)	

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(Ref.No. 30,000 Series)

## &lt; CAPACITOR &gt;

△C1	1-104-705-11	FILM	0.1uF	20%	250V
△C1	1-104-706-11	FILM	0.22uF	20%	250V
△C2	1-104-705-11	FILM	0.1uF	20%	250V

The components identified by mark △ or dotted line with mark △ are critical for safety. Replace only with part number specified.

Les composants identifiés par une marque △ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

# POWER BLOCK (U-1)

Ref. No.	Part No.	Description	Remark
△C3	1-115-383-11	CERAMIC	0.001uF 10% 125V (DSR-40)
△C3	1-127-786-11	CERAMIC	680PF 10% 250V (DSR-40P)
△C4	1-115-383-11	CERAMIC	0.001uF 10% 125V (DSR-40)
△C4	1-127-786-11	CERAMIC	680PF 10% 250V (DSR-40P)
△C5	1-115-383-11	CERAMIC	0.001uF 10% 125V (DSR-40)
△C5	1-127-786-11	CERAMIC	680PF 10% 250V (DSR-40P)
△C6	1-104-705-11	FILM	0.1uF 20% 250V
C7	1-115-383-11	CERAMIC	0.001uF 10% 125V
C8	1-115-383-11	CERAMIC	0.001uF 10% 125V
△C9	9-880-364-01	ELECT	470uF 200V (DSR-40)
△C9	1-117-188-11	ELECT	150uF 20% 400V (DSR-40P)
C10	9-880-365-01	FILM	0.01uF 630V
C11	9-880-366-01	CERAMIC	680PF (DSR-40)
C11	9-880-424-01	CERAMIC	330PF (DSR-40P)
C12	9-880-366-01	CERAMIC	680PF (DSR-40)
C12	9-880-424-01	CERAMIC	330PF (DSR-40P)
C13	1-126-802-11	ELECT	10uF 20% 50V
C14	1-126-802-11	ELECT	10uF 20% 50V
C15	1-104-790-51	ELECT	2.2uF 20% 50V
C16	9-880-367-01	FILM	0.1uF
C17	9-880-368-01	FILM	470PF
C18	9-880-369-01	FILM	0.15uF
C19	9-880-370-01	FILM	0.033uF
C20	1-126-802-11	ELECT	10uF 20% 50V
C21	9-880-371-01	CERAMIC	0.001uF
C22	9-880-371-01	CERAMIC	0.001uF
C27	1-115-788-11	ELECT	820uF 20% 25V
C28	1-115-788-11	ELECT	820uF 20% 25V
C29	9-880-367-01	FILM	0.1uF
C31	9-880-367-01	FILM	0.1uF
C32	9-880-367-01	FILM	0.1uF
C33	1-115-788-11	ELECT	820uF 20% 25V

## < CONNECTOR >

* CN1	1-580-230-31	PIN, CONNECTOR (FOR BOARD) 2P
* CN3	9-882-860-01	BOARD IN HARNESS 4P

## < DIODE >

△D1	8-719-500-58	DIODE	D3SBA60
D4	8-719-979-63	DIODE	UF4005 (DSR-40)
D4	8-719-053-19	DIODE	UF4007 (DSR-40P)
D5	8-719-110-72	DIODE	RD30ESB2
D6	8-719-110-72	DIODE	RD30ESB2
D8	8-719-053-20	DIODE	UF4003P
D9	8-719-109-85	DIODE	RD5.1ESB2
D10	8-719-510-39	DIODE	D10LC20U
D11	8-719-109-97	DIODE	RD6.8ESB2
D12	8-719-110-41	DIODE	RD15ESB2

Ref. No.	Part No.	Description	Remark
		< FUSE >	
△F1	9-880-385-01	FUSE (3.15A/125V) (DSR-40)	
△F1	9-882-875-01	FUSE (3.15A/250V) (DSR-40P)	
		< COIL >	
△L1	9-880-379-01	INDUCTOR 6mH (DSR-40)	
△L1	9-880-431-01	INDUCTOR 15mH (DSR-40P)	
△L2	9-880-380-01	INDUCTOR 5.6mH (DSR-40)	
△L2	9-880-432-01	INDUCTOR 22mH (DSR-40P)	
		< TRANSISTOR >	
Q1	8-729-037-96	TRANSISTOR 2SK2366 (DSR-40)	
Q1	9-880-423-01	TRANSISTOR 2SK2483 (DSR-40P)	
Q3	8-729-281-53	TRANSISTOR 2SC1815-GR	
		< RESISTOR >	
△R1	9-880-373-01	METAL OXIDE 220K	1W (DSR-40)
△R1	9-880-427-01	METAL OXIDE 330K	1W (DSR-40P)
R2	1-216-486-11	METAL OXIDE 82K	2W (DSR-40)
R2	9-880-428-01	METAL OXIDE 270K	2W (DSR-40P)
R3	1-212-865-11	CARBON 22	5% 1/4W F
R4	1-247-879-11	CARBON 100K	5% 1/4W
R5	1-215-884-11	METAL OXIDE 47	5% 2W
R7	9-880-375-01	METAL OXIDE 18K	2W (DSR-40)
R7	1-216-468-11	METAL OXIDE 82K	2W (DSR-40P)
R8	9-880-376-01	METAL OXIDE 0.22	5W (DSR-40)
R8	9-880-429-01	METAL OXIDE 0.47	5W (DSR-40P)
R9	1-216-377-11	METAL OXIDE 4.7	5% 2W
R10	1-215-426-11	METAL 5.1K	1% 1/4W
R11	1-247-819-11	CARBON 330	5% 1/4W (DSR-40)
R11	1-247-831-11	CARBON 1K	5% 1/4W (DSR-40P)
R12	1-215-389-11	METAL 47	1% 1/4W
R13	1-215-385-11	METAL 33	1% 1/4W
R14	1-247-857-11	CARBON 12K	5% 1/4W
R18	1-247-847-11	CARBON 4.7K	5% 1/4W
R19	1-247-847-11	CARBON 4.7K	5% 1/4W
R20	1-247-839-11	CARBON 2.2K	5% 1/4W
R21	1-247-831-11	CARBON 1K	5% 1/4W
R22	1-247-843-11	CARBON 3.3K	5% 1/4W
R23	1-247-795-11	CARBON 33	5% 1/4W
R24	1-215-427-11	METAL 1.8K	1% 1/4W
R25	1-215-427-11	METAL 1.8K	1% 1/4W
R26	1-215-433-11	METAL 3.3K	1% 1/4W
R27	1-247-831-11	CARBON 1K	5% 1/4W
R28	9-880-375-01	METAL OXIDE 18K	2W (DSR-40)
R28	1-216-468-11	METAL OXIDE 82K	2W (DSR-40P)

The components identified by mark △ or dotted line with mark △ are critical for safety. Replace only with part number specified.

Les composants identifiés par une marque △ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

## POWER BLOCK (U-1)

## POWER BLOCK (U-2)

Ref. No.	Part No.	Description	Remark
R30	1-215-925-11	METAL OXIDE 22K	3W
		< VARIABLE RESISTOR >	
RV1	9-880-377-01	RES, VAR, CARBON 3K (DSR-40)	
RV1	9-882-873-01	RES, VAR, CARBON 1K (DSR-40P)	
		< TRANSFORMER >	
△T1	9-882-859-01	TRANSFORMER, POWER (DSR-40)	
△T1	9-882-874-01	TRANSFORMER, POWER (DSR-40P)	
		< THERMISTOR >	
TH1	9-880-384-01	THERMISTOR 8Ω	
		< IC >	
Z1	8-759-464-69	IC FA5317P	
△Z2	8-749-924-80	PHOTO COUPLER PS2561L1-1-V	
△Z3	8-749-924-80	PHOTO COUPLER PS2561L1-1-V	
△	1-468-377-11	POWER BLOCK (U-2) (DSR-40)	
△	1-468-378-11	POWER BLOCK (U-2) (DSR-40P)	
		*****	
		(Ref.No. 40,000 Series)	
		< CAPACITOR >	
C1	1-115-781-11	ELECT 820uF 20% 25V	
C2	1-115-781-11	ELECT 820uF 20% 25V	
C3	9-880-339-01	FILM 0.047uF	
C4	1-115-781-11	ELECT 820uF 20% 25V	
C5	1-115-787-11	ELECT 820uF 20% 25V	
C7	9-880-407-01	CERAMIC 2200PF	
C8	9-880-407-01	CERAMIC 2200PF	
C9	1-115-737-11	ELECT 1000uF 20% 10V	
C10	1-115-737-11	ELECT 1000uF 20% 10V	
C11	9-880-402-01	FILM 0.01uF	
C12	9-880-406-01	ELECT 680uF 20% 10V	
C13	9-880-406-01	ELECT 680uF 20% 10V	
C14	9-880-339-01	FILM 0.047uF	
C15	9-880-339-01	FILM 0.047uF	
C16	9-880-339-01	FILM 0.047uF	
C17	9-880-339-01	FILM 0.047uF	
C18	1-115-730-11	ELECT 180uF 20% 10V	
C19	1-115-730-11	ELECT 180uF 20% 10V	
C20	1-115-730-11	ELECT 180uF 20% 10V	
C21	1-115-754-11	ELECT 120uF 20% 16V	
C22	9-880-339-01	FILM 0.047uF	
C23	9-880-339-01	FILM 0.047uF	
C24	9-880-339-01	FILM 0.047uF	
C25	9-880-339-01	FILM 0.047uF	
C26	1-115-785-11	ELECT 470uF 20% 25V	
C27	9-880-339-01	FILM 0.047uF	
C28	9-880-407-01	CERAMIC 2200PF	
C29	9-880-407-01	CERAMIC 2200PF	
C30	9-880-406-01	ELECT 680uF 20% 10V	
C31	9-880-406-01	ELECT 680uF 20% 10V	
C32	9-880-402-01	FILM 0.01uF	

Ref. No.	Part No.	Description	Remark
C33	9-880-406-01	ELECT 680uF 20% 10V	
C34	1-115-785-11	ELECT 470uF 20% 25V	
C36	9-880-407-01	CERAMIC 2200PF	
C37	9-880-407-01	CERAMIC 2200PF	
C38	1-124-534-11	ELECT 680uF 20% 16V	
C40	1-124-534-11	ELECT 680uF 20% 16V	
C41	9-880-339-01	FILM 0.047uF	
C42	9-880-339-01	FILM 0.047uF	
C43	9-880-339-01	FILM 0.047uF	
C44	1-115-730-11	ELECT 180uF 20% 10V	
C45	1-115-754-11	ELECT 120uF 20% 16V	
C46	1-115-754-11	ELECT 120uF 20% 16V	
C47	1-117-154-11	ELECT 33uF 20% 16V	
C48	9-880-652-01	ELECT 100uF 20% 10V	
C49	9-880-652-01	ELECT 100uF 20% 10V	
C50	1-117-154-11	ELECT 33uF 20% 16V	
C51	1-115-566-91	CERAMIC CHIP 4.7uF 10% 10V	
C52	1-115-566-91	CERAMIC CHIP 4.7uF 10% 10V	
C53	1-115-566-91	CERAMIC CHIP 4.7uF 10% 10V	
C54	1-115-566-91	CERAMIC CHIP 4.7uF 10% 10V	
C55	1-107-682-91	CERAMIC CHIP 1uF 10% 16V	
C56	1-115-566-91	CERAMIC CHIP 4.7uF 10% 10V	
C57	1-115-566-91	CERAMIC CHIP 4.7uF 10% 10V	
C58	1-115-566-91	CERAMIC CHIP 4.7uF 10% 10V	
C59	1-115-566-91	CERAMIC CHIP 4.7uF 10% 10V	
C60	1-115-566-91	CERAMIC CHIP 4.7uF 10% 10V	
C61	1-115-566-91	CERAMIC CHIP 4.7uF 10% 10V	
C62	1-115-566-91	CERAMIC CHIP 4.7uF 10% 10V	
C63	1-115-566-91	CERAMIC CHIP 4.7uF 10% 10V	
C64	1-115-566-91	CERAMIC CHIP 4.7uF 10% 10V	
C65	1-115-566-91	CERAMIC CHIP 4.7uF 10% 10V	
C66	1-107-682-91	CERAMIC CHIP 1uF 10% 16V	
C67	1-107-682-91	CERAMIC CHIP 1uF 10% 16V	
C68	1-107-682-91	CERAMIC CHIP 1uF 10% 16V	
C69	1-107-682-91	CERAMIC CHIP 1uF 10% 16V	
C70	9-882-863-01	FILM 0.1uF	
C71	9-882-863-01	FILM 0.1uF	
		< CONNECTOR >	
* CN1	9-880-417-01	PIN, CONNECTOR 4P	
* CN10	1-564-018-11	PIN, CONNECTOR 8P	
* CN11	1-564-019-11	PIN, CONNECTOR 9P	
* CN12	1-564-021-11	PIN, CONNECTOR 11P	
* CN13	1-564-012-11	PIN, CONNECTOR 2P	
		< DIODE >	
D1	8-719-109-89	DIODE RD5.6ESB2	
D2	8-719-500-70	DIODE D5S4M	
D3	8-719-107-94	DIODE 1SS202-1	
D4	8-719-107-94	DIODE 1SS202-1	
D5	8-719-107-94	DIODE 1SS202-1	
D7	8-719-018-83	DIODE D2S4M	
D8	8-719-500-70	DIODE D5S4M	
		< COIL >	
L1	1-459-407-11	INDUCTOR 30uH	
L2	9-882-865-01	INDUCTOR 15uH	
L3	9-882-866-01	INDUCTOR 130uH	

The components identified by mark △ or dotted line with mark △ are critical for safety. Replace only with part number specified.

Les composants identifiés par une marque △ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

## POWER BLOCK (U-2)

## RE-33

Ref. No.	Part No.	Description	Remark
L4	9-882-867-01	INDUCTOR 15uH	
L5	9-880-412-01	INDUCTOR 15uH	
L6	9-880-412-01	INDUCTOR 15uH	
L7	9-880-412-01	INDUCTOR 15uH	
L8	9-882-868-01	INDUCTOR 450uH	
L9	9-882-869-01	INDUCTOR 15uH	
L10	9-882-870-01	INDUCTOR 130uH	
L11	9-882-871-01	INDUCTOR	

## &lt; TRANSISTOR &gt;

Q1	8-729-201-53	TRANSISTOR 2SA1015	
Q2	8-729-201-53	TRANSISTOR 2SA1015	
Q4	8-729-203-76	TRANSISTOR 2SC3328	

## &lt; RESISTOR &gt;

R1	1-215-445-11	METAL	10K	1%	1/4W
R2	1-215-427-11	METAL	1.8K	1%	1/4W
R3	1-215-423-11	METAL	1.2K	1%	1/4W
R4	1-216-431-11	METAL OXIDE	560	5%	1W
R5	1-215-857-11	METAL OXIDE	10	5%	1W
R6	1-215-443-11	METAL	8.2K	1%	1/4W
R7	1-215-416-11	METAL	620	1%	1/4W
R8	1-215-429-11	METAL	2.2K	1%	1/4W
R9	1-247-835-11	CARBON	1.5K	5%	1/4W
R10	1-215-443-11	METAL	8.2K	1%	1/4W
R11	1-215-413-11	METAL	470	1%	1/4W
R12	1-215-429-11	METAL	2.2K	1%	1/4W
R13	1-215-439-11	METAL	5.6K	1%	1/4W
R14	1-215-422-11	METAL	1.1K	1%	1/4W
R15	1-215-429-11	METAL	2.2K	1%	1/4W
R16	1-215-451-11	METAL	18K	1%	1/4W
R17	1-215-421-11	METAL	1K	1%	1/4W
R18	1-215-429-11	METAL	2.2K	1%	1/4W
R19	1-247-831-11	CARBON	1K	5%	1/4W
R20	1-247-845-11	CARBON	3.9K	5%	1/4W
R21	1-247-801-11	CARBON	56	5%	1/4W
R22	1-247-801-11	CARBON	56	5%	1/4W
R23	1-247-801-11	CARBON	56	5%	1/4W
R24	1-247-801-11	CARBON	56	5%	1/4W
R25	1-247-831-11	CARBON	1K	5%	1/4W
R26	1-247-847-11	CARBON	4.7K	5%	1/4W
R29	1-247-855-11	CARBON	10K	5%	1/4W
R30	1-215-857-11	METAL OXIDE	10	5%	1W
R31	1-215-387-11	METAL	39	1%	1/4W
R32	1-215-408-11	METAL	300	1%	1/4W
R33	1-215-405-11	METAL	220	1%	1/4W
R34	1-215-857-11	METAL OXIDE	10	5%	1W
R35	1-215-431-11	METAL	2.7K	1%	1/4W
R36	1-215-449-11	METAL	15K	1%	1/4W
R37	1-215-445-11	METAL	10K	1%	1/4W
R38	1-247-841-11	CARBON	2.7K	5%	1/4W
R39	1-247-831-11	CARBON	1K	5%	1/4W
R40	9-882-864-01	METAL	22	5%	1W F

## &lt; IC &gt;

Z1	8-759-293-98	IC PQ30RV21	
Z2	8-759-335-26	IC LM2576T-ADJ	
Z3	9-880-398-01	IC TD62305AP	
Z4	8-759-098-24	IC PQ30RV11	
Z5	9-880-397-01	IC PQ29L03L	

Ref. No.	Part No.	Description	Remark
Z6	8-759-098-24	IC PQ30RV11	
Z7	8-759-098-24	IC PQ30RV11	
Z8	8-759-790-61	IC LM2575-ADJ-LB03	
Z9	8-759-355-26	IC LM2576T-ADJ	
Z10	8-759-392-17	IC uPC7908AHF	
Z11	8-759-333-80	IC LM2990T-12	
Z12	8-759-089-53	IC uPC79M05HF	

\* A-7073-775-A RE-33 BOARD, COMPLETE

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(Ref.No. 6,000 Series)

## &lt; CAPACITOR &gt;

C002	1-163-275-11	CERAMIC CHIP	0.001uF	5%	50V
C003	1-126-400-11	ELECT	22uF	20%	35V
C004	1-163-275-11	CERAMIC CHIP	0.001uF	5%	50V
C006	1-126-400-11	ELECT	22uF	20%	35V
C008	1-126-205-11	ELECT CHIP	47uF	20%	6.3V
C009	1-126-205-11	ELECT CHIP	47uF	20%	6.3V
C010	1-163-809-11	CERAMIC CHIP	0.047uF	10%	25V
C011	1-163-809-11	CERAMIC CHIP	0.047uF	10%	25V
C012	1-163-275-11	CERAMIC CHIP	0.001uF	5%	50V
C014	1-163-275-11	CERAMIC CHIP	0.001uF	5%	50V
C020	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V

## &lt; CONNECTOR &gt;

CN001	1-774-043-11	CONNECTOR, FPC (DIP TYPE)26P	
CN002	1-506-479-11	PIN, CONNECTOR 14P	
* CN003	1-564-005-11	PIN, CONNECTOR 6P	

## &lt; DIODE &gt;

D001	8-719-106-80	DIODE RD13M-T1B2	
D002	8-719-106-80	DIODE RD13M-T1B2	
D003	8-719-106-80	DIODE RD13M-T1B2	
D004	8-719-106-80	DIODE RD13M-T1B2	
D005	8-719-421-59	DIODE MA3075WA-(TX)	
D006	8-719-421-59	DIODE MA3075WA-(TX)	
D007	8-719-421-59	DIODE MA3075WA-(TX)	
D008	8-719-106-80	DIODE RD13M-T1B2	
D009	8-719-421-59	DIODE MA3075WA-(TX)	
D010	8-719-106-80	DIODE RD13M-T1B2	
D011	8-719-106-80	DIODE RD13M-T1B2	
D012	8-719-106-80	DIODE RD13M-T1B2	
D013	8-719-421-59	DIODE MA3075WA-(TX)	
D014	8-719-421-59	DIODE MA3075WA-(TX)	
D015	8-719-421-59	DIODE MA3075WA-(TX)	
D016	8-719-421-59	DIODE MA3075WA-(TX)	
D017	8-719-421-59	DIODE MA3075WA-(TX)	
D018	8-719-421-59	DIODE MA3075WA-(TX)	
D019	8-719-106-80	DIODE RD13M-T1B2	
D020	8-719-106-80	DIODE RD13M-T1B2	
D021	8-719-106-80	DIODE RD13M-T1B2	
D022	8-719-106-80	DIODE RD13M-T1B2	
D023	8-719-106-80	DIODE RD13M-T1B2	
D024	8-719-106-80	DIODE RD13M-T1B2	
D025	8-719-106-80	DIODE RD13M-T1B2	
D026	8-719-106-80	DIODE RD13M-T1B2	

Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
< FERRITE BEAD >				C773	1-113-619-11	CERAMIC CHIP 0.47uF	10V
FB001	1-500-241-22	FERRITE 0UH		C774	1-164-360-11	CERAMIC CHIP 0.1uF	16V
FB002	1-500-241-22	FERRITE 0UH		C775	1-162-970-11	CERAMIC CHIP 0.01uF	10% 25V
FB003	1-500-241-22	FERRITE 0UH		C776	1-162-923-11	CERAMIC CHIP 47PF	5% 50V
FB004	1-500-241-22	FERRITE 0UH		C777	1-162-923-11	CERAMIC CHIP 47PF	5% 50V
FB005	1-500-241-22	FERRITE 0UH		C778	1-162-974-11	CERAMIC CHIP 0.01uF	50V
FB006	1-500-241-22	FERRITE 0UH		C779	1-162-974-11	CERAMIC CHIP 0.01uF	50V
FB007	1-500-241-22	FERRITE 0UH		C780	1-162-974-11	CERAMIC CHIP 0.01uF	50V
FB008	1-500-241-22	FERRITE 0UH		C781	1-162-974-11	CERAMIC CHIP 0.01uF	50V
FB009	1-500-241-22	FERRITE 0UH		C782	1-164-156-11	CERAMIC CHIP 0.1uF	25V
FB010	1-500-241-22	FERRITE 0UH		C783	1-135-201-11	TANTALUM CHIP 10uF	20% 4V
< IC >				C784	1-162-970-11	CERAMIC CHIP 0.01uF	10% 25V
IC001	8-759-745-64	IC NJM4560M-TE2		C786	1-162-974-11	CERAMIC CHIP 0.01uF	50V
< JACK >				C788	1-104-851-11	TANTAL. CHIP 10uF	20% 10V
J001	1-537-861-11	TERMINAL BOARD (INPUT/S VIDEO OUTPUT/MONITOR)		C789	1-162-974-11	CERAMIC CHIP 0.01uF	50V
* J002	1-764-066-11	CONNECTOR, BNC (VIDEO/Y OUTPUT)		C791	1-162-974-11	CERAMIC CHIP 0.01uF	50V
* J003	1-764-066-11	CONNECTOR, BNC (REF.VIDEO INPUT/R-Y OUTPUT)		C792	1-119-750-11	TANTAL. CHIP 22uF	20% 6.3V
J004	1-785-572-11	CONNECTOR, BNC (B-Y OUTPUT)		C793	1-107-826-91	CERAMIC CHIP 0.1uF	10% 16V
< RESISTOR >				C794	1-107-826-91	CERAMIC CHIP 0.1uF	10% 16V
R001	1-208-838-91	RES,CHIP 220K 0.50% 1/10W		C795	1-128-004-11	ELECT CHIP 10uF	20% 16V
R002	1-208-838-91	RES,CHIP 220K 0.50% 1/10W		C796	1-162-974-11	CERAMIC CHIP 0.01uF	50V
R004	1-208-774-11	RES,CHIP 470 0.50% 1/10W		C797	1-107-826-91	CERAMIC CHIP 0.1uF	10% 16V
R005	1-208-774-11	RES,CHIP 470 0.50% 1/10W		C798	1-162-974-11	CERAMIC CHIP 0.01uF	50V
R006	1-208-755-11	RES,CHIP 75 0.50% 1/10W		C799	1-164-217-11	CERAMIC CHIP 150PF	5% 50V
R007	1-208-755-11	RES,CHIP 75 0.50% 1/10W		C803	1-164-217-11	CERAMIC CHIP 150PF	5% 50V
R008	1-208-755-11	RES,CHIP 75 0.50% 1/10W		C811	1-113-619-11	CERAMIC CHIP 0.47uF	10V
R028	1-208-818-11	RES,CHIP 33K 0.50% 1/10W		C813	1-162-974-11	CERAMIC CHIP 0.01uF	50V
R029	1-208-818-11	RES,CHIP 33K 0.50% 1/10W		C814	1-162-970-11	CERAMIC CHIP 0.01uF	10% 25V
R030	1-208-755-11	RES,CHIP 75 0.50% 1/10W		C815	1-162-964-11	CERAMIC CHIP 0.001uF	10% 50V
R050	1-208-818-11	RES,CHIP 33K 0.50% 1/10W		C816	1-162-964-11	CERAMIC CHIP 0.001uF	10% 50V
R051	1-208-818-11	RES,CHIP 33K 0.50% 1/10W		C817	1-104-851-11	TANTAL. CHIP 10uF	20% 10V
*****				C818	1-162-964-11	CERAMIC CHIP 0.001uF	10% 50V
* A-7067-132-A	RP-228 BOARD, COMPLETE (DSR-40)			C819	1-162-974-11	CERAMIC CHIP 0.01uF	50V
* A-7067-128-A	RP-228 BOARD, COMPLETE (DSR-40P)			C821	1-164-360-11	CERAMIC CHIP 0.1uF	16V
*****				C822	1-164-360-11	CERAMIC CHIP 0.1uF	16V
(Ref.No. 7,000 Series)				C823	1-164-360-11	CERAMIC CHIP 0.1uF	16V
1-776-149-11	CABLE, FLEXIBLE FLAT 30P			C824	1-162-970-11	CERAMIC CHIP 0.01uF	10% 25V
1-783-376-11	CABLE, FLEXIBLE FLAT (FFC-245)			C825	1-164-315-11	CERAMIC CHIP 470PF	5% 50V
< CAPACITOR >				C826	1-162-974-11	CERAMIC CHIP 0.01uF	50V
C146	1-162-970-11	CERAMIC CHIP 0.01uF 10% 25V		C827	1-162-974-11	CERAMIC CHIP 0.01uF	50V
C148	1-162-974-11	CERAMIC CHIP 0.01uF 50V		C828	1-162-974-11	CERAMIC CHIP 0.01uF	50V
C701	1-164-174-11	CERAMIC CHIP 0.0082uF 10% 25V		C829	1-135-201-11	TANTALUM CHIP 10uF	20% 4V
C702	1-162-967-11	CERAMIC CHIP 0.0033uF 10% 50V		C830	1-164-360-11	CERAMIC CHIP 0.1uF	16V
C703	1-164-174-11	CERAMIC CHIP 0.0082uF 10% 25V		C831	1-135-259-11	TANTAL. CHIP 10uF	20% 6.3V
C704	1-162-967-11	CERAMIC CHIP 0.0033uF 10% 50V		C832	1-164-360-11	CERAMIC CHIP 0.1uF	16V
C705	1-164-173-11	CERAMIC CHIP 0.0039uF 10% 50V		C833	1-162-974-11	CERAMIC CHIP 0.01uF	50V
C706	1-164-173-11	CERAMIC CHIP 0.0039uF 10% 50V		C834	1-162-974-11	CERAMIC CHIP 0.01uF	50V
C761	1-164-360-11	CERAMIC CHIP 0.1uF 16V		C835	1-162-974-11	CERAMIC CHIP 0.01uF	50V
C762	1-164-360-11	CERAMIC CHIP 0.1uF 16V		C836	1-162-974-11	CERAMIC CHIP 0.01uF	50V
C763	1-164-360-11	CERAMIC CHIP 0.1uF 16V		C837	1-162-970-11	CERAMIC CHIP 0.01uF	10% 25V
C770	1-135-201-11	TANTALUM CHIP 10uF 20% 4V		C838	1-162-913-11	CERAMIC CHIP 8PF	0.5PF 50V
C771	1-162-974-11	CERAMIC CHIP 0.01uF 50V		C839	1-162-913-11	CERAMIC CHIP 8PF	0.5PF 50V
C772	1-164-156-11	CERAMIC CHIP 0.1uF 25V		C841	1-162-923-11	CERAMIC CHIP 47PF	5% 50V
				C842	1-164-360-11	CERAMIC CHIP 0.1uF	16V
				C843	1-164-677-11	CERAMIC CHIP 0.033uF	10% 16V
				C844	1-164-677-11	CERAMIC CHIP 0.033uF	10% 16V
				C845	1-164-357-11	CERAMIC CHIP 1000PF	5% 50V
				C847	1-162-974-11	CERAMIC CHIP 0.01uF	50V
				C848	1-104-851-11	TANTAL. CHIP 10uF	20% 10V
				C850	1-162-974-11	CERAMIC CHIP 0.01uF	50V

# RP-228

Ref. No.	Part No.	Description	Remark
C853	1-162-974-11	CERAMIC CHIP 0.01uF	50V
C854	1-104-851-11	TANTAL. CHIP 10uF	20% 10V
C855	1-104-851-11	TANTAL. CHIP 10uF	20% 10V
C857	1-162-927-11	CERAMIC CHIP 100PF	5% 50V
C859	1-162-974-11	CERAMIC CHIP 0.01uF	50V
C861	1-162-970-11	CERAMIC CHIP 0.01uF	10% 25V
C862	1-162-970-11	CERAMIC CHIP 0.01uF	10% 25V
C874	1-162-974-11	CERAMIC CHIP 0.01uF	50V
C875	1-135-259-11	TANTAL. CHIP 10uF	20% 6.3V

## < CONNECTOR >

CN101	1-750-345-11	CONNECTOR, FFC/EPC (ZIF) 30P
CN102	1-750-345-11	CONNECTOR, FFC/EPC (ZIF) 30P
CN103	1-750-345-11	CONNECTOR, FFC/EPC (ZIF) 30P
CN771	1-770-305-11	CONNECTOR, FFC/FPC 10P
CN775	1-750-303-41	CONNECTOR, BOARD TO BOARD 20P

## < DIODE >

D771	8-719-404-50	DIODE MA111-TX
D772	8-719-404-50	DIODE MA111-TX
D773	8-719-055-86	DIODE KV1470TL1-3
D774	8-719-052-27	DIODE 1SS351-TB
D775	8-719-052-27	DIODE 1SS351-TB
D791	8-719-404-50	DIODE MA111-TX

## < FILTER >

FL770	1-411-951-21	DELAY LINE, LC (23NS)
FL771	1-233-734-21	FILTER, LOW PASS

## < IC >

IC770	8-759-445-93	IC AK6440AM-E2
IC771	8-759-426-25	IC MB88346LPFV-G-BND-ER
IC772	8-752-371-18	IC CXD2302Q-T4
IC773	8-752-070-12	IC CXA1762Q-T4
IC774	8-752-386-38	IC CXD3105R-T6
IC775	8-752-074-59	IC CXA2023R-T4
IC777	8-752-073-50	IC CXA2018Q-T4
IC791	8-759-426-83	IC TK11228BMCL

## < COIL >

L105	1-414-398-11	INDUCTOR 10uH
L770	1-414-398-11	INDUCTOR 10uH
L773	1-414-398-11	INDUCTOR 10uH
L774	1-414-398-11	INDUCTOR 10uH
L776	1-414-398-11	INDUCTOR 10uH
L779	1-410-737-31	INDUCTOR CHIP 0.47uH
L781	1-412-963-11	INDUCTOR 100uH
L782	1-412-963-11	INDUCTOR 100uH
L783	1-414-398-11	INDUCTOR 10uH
L784	1-414-398-11	INDUCTOR 10uH
L789	1-414-398-11	INDUCTOR 10uH

## < TRANSISTOR >

Q105	8-729-037-52	TRANSISTOR 2SD2216J-QR(TX).SO
Q109	8-729-037-52	TRANSISTOR 2SD2216J-QR(TX).SO
Q701	8-729-013-04	TRANSISTOR 2SC4851-TL
Q702	8-729-013-04	TRANSISTOR 2SC4851-TL
Q772	8-729-037-72	TRANSISTOR UN9211J-(TX).SO
Q773	8-729-141-48	TRANSISTOR 2SB624-T1BV4

Ref. No.	Part No.	Description	Remark
Q774	8-729-141-48	TRANSISTOR 2SB624-T1BV4	
Q775	8-729-037-72	TRANSISTOR UN9211J-(TX).SO	
Q776	8-729-037-52	TRANSISTOR 2SD2216J-QR(TX).SO	
Q777	8-729-037-52	TRANSISTOR 2SD2216J-QR(TX).SO	
Q778	8-729-037-52	TRANSISTOR 2SD2216J-QR(TX).SO	
Q779	8-729-037-52	TRANSISTOR 2SD2216J-QR(TX).SO	
Q784	8-729-037-53	TRANSISTOR 2SB1462J-QR(TX).SO	

## < RESISTOR >

R117	1-216-807-11	METAL CHIP 68	5%	1/16W
R118	1-216-833-11	METAL CHIP 10K	5%	1/16W
R120	1-216-864-11	METAL CHIP 0	5%	1/16W
R121	1-216-825-11	METAL CHIP 2.2K	5%	1/16W
R122	1-216-825-11	METAL CHIP 2.2K	5%	1/16W
R123	1-216-864-11	METAL CHIP 0	5%	1/16W (DSR-40)
R124	1-216-864-11	METAL CHIP 0	5%	1/16W (DSR-40P)
R137	1-216-807-11	METAL CHIP 68	5%	1/16W
R138	1-216-833-11	METAL CHIP 10K	5%	1/16W
R143	1-216-833-11	METAL CHIP 10K	5%	1/16W
R144	1-216-831-11	METAL CHIP 6.8K	5%	1/16W
R147	1-216-864-11	METAL CHIP 0	5%	1/16W
R206	1-216-821-11	METAL CHIP 1K	5%	1/16W
R308	1-216-821-11	METAL CHIP 1K	5%	1/16W
R309	1-216-821-11	METAL CHIP 1K	5%	1/16W
R310	1-216-821-11	METAL CHIP 1K	5%	1/16W
R311	1-216-821-11	METAL CHIP 1K	5%	1/16W
R312	1-216-821-11	METAL CHIP 1K	5%	1/16W
R313	1-216-821-11	METAL CHIP 1K	5%	1/16W
R314	1-216-821-11	METAL CHIP 1K	5%	1/16W
R315	1-216-864-11	METAL CHIP 0	5%	1/16W
R316	1-216-833-11	METAL CHIP 10K	5%	1/16W
R701	1-216-825-11	METAL CHIP 2.2K	5%	1/16W
R702	1-216-829-11	METAL CHIP 4.7K	5%	1/16W
R703	1-216-809-11	METAL CHIP 100	5%	1/16W
R704	1-216-810-11	METAL CHIP 120	5%	1/16W
R705	1-216-825-11	METAL CHIP 2.2K	5%	1/16W
R706	1-216-829-11	METAL CHIP 4.7K	5%	1/16W
R707	1-216-809-11	METAL CHIP 100	5%	1/16W
R708	1-216-810-11	METAL CHIP 120	5%	1/16W
R770	1-216-845-11	METAL CHIP 100K	5%	1/16W
R772	1-216-296-91	SHORT 0		
R774	1-216-841-11	METAL CHIP 47K	5%	1/16W
R776	1-216-818-11	METAL CHIP 560	5%	1/16W
R779	1-216-847-11	METAL CHIP 150K	5%	1/16W
R780	1-216-837-11	METAL CHIP 22K	5%	1/16W
R782	1-216-833-11	METAL CHIP 10K	5%	1/16W
R783	1-216-833-11	METAL CHIP 10K	5%	1/16W
R786	1-216-817-11	METAL CHIP 470	5%	1/16W
R787	1-202-924-11	RES.CHIP 240	5%	1/16W
R788	1-202-924-11	RES.CHIP 240	5%	1/16W
R789	1-216-824-11	METAL CHIP 1.8K	5%	1/16W
R790	1-216-841-11	METAL CHIP 47K	5%	1/16W
R791	1-216-815-11	METAL CHIP 330	5%	1/16W
R792	1-216-814-11	METAL CHIP 270	5%	1/16W
R793	1-216-827-11	METAL CHIP 3.3K	5%	1/16W
R794	1-216-816-11	METAL CHIP 390	5%	1/16W
R796	1-216-809-11	METAL CHIP 100	5%	1/16W
R797	1-216-827-11	METAL CHIP 3.3K	5%	1/16W

Ref. No.	Part No.	Description	Remark
R798	1-216-815-11	METAL CHIP 330 5%	1/16W
R799	1-216-825-11	METAL CHIP 2.2K 5%	1/16W
R800	1-216-833-11	METAL CHIP 10K 5%	1/16W
R801	1-216-833-11	METAL CHIP 10K 5%	1/16W
R802	1-216-841-11	METAL CHIP 47K 5%	1/16W
R804	1-216-839-11	METAL CHIP 33K 5%	1/16W
R806	1-216-821-11	METAL CHIP 1K 5%	1/16W
R808	1-216-821-11	METAL CHIP 1K 5%	1/16W
R810	1-216-837-11	METAL CHIP 22K 5%	1/16W
R812	1-216-837-11	METAL CHIP 22K 5%	1/16W
R814	1-216-853-11	METAL CHIP 470K 5%	1/16W
R815	1-216-853-11	METAL CHIP 470K 5%	1/16W
R818	1-216-837-11	METAL CHIP 22K 5%	1/16W
R819	1-216-839-11	METAL CHIP 33K 5%	1/16W
R820	1-216-803-11	METAL CHIP 33 5%	1/16W
R822	1-216-834-11	METAL CHIP 12K 5%	1/16W
R824	1-216-821-11	METAL CHIP 1K 5%	1/16W
R825	1-216-841-11	METAL CHIP 47K 5%	1/16W
R826	1-216-839-11	METAL CHIP 33K 5%	1/16W
R827	1-216-821-11	METAL CHIP 1K 5%	1/16W
R830	1-216-831-11	METAL CHIP 6.8K 5%	1/16W
R832	1-216-807-11	METAL CHIP 68 5%	1/16W
R843	1-216-822-11	METAL CHIP 1.2K 5%	1/16W
R844	1-216-837-11	METAL CHIP 22K 5%	1/16W
R849	1-218-837-11	RES,CHIP 390 0.50%	1/16W
R850	1-218-835-11	RES,CHIP 330 0.50%	1/16W
R851	1-218-835-11	RES,CHIP 330 0.50%	1/16W
R852	1-218-837-11	RES,CHIP 390 0.50%	1/16W
R858	1-216-816-11	METAL CHIP 390 5%	1/16W

\* A-7073-778-A RS-80 BOARD, COMPLETE (DSR-40)  
 \* A-7073-781-A RS-80 BOARD, COMPLETE (DSR-40P)

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(Ref.No. 3,000 Series)

< CAPACITOR >

C001	1-113-619-11	CERAMIC CHIP 0.47uF	10V
C002	1-162-957-11	CERAMIC CHIP 220PF 5%	50V
C003	1-113-619-11	CERAMIC CHIP 0.47uF	10V
C004	1-124-778-00	ELECT CHIP 22uF 20%	6.3V
C005	1-164-360-11	CERAMIC CHIP 0.1uF	16V
C006	1-164-360-11	CERAMIC CHIP 0.1uF	16V
C007	1-162-927-11	CERAMIC CHIP 100PF 5%	50V
C008	1-162-927-11	CERAMIC CHIP 100PF 5%	50V
C009	1-124-778-00	ELECT CHIP 22uF 20%	6.3V

< CONNECTOR >

CN001	1-770-693-11	CONNECTOR, FFC/FPC 10P
CN002	1-573-005-21	CONNECTOR, D-SUB 9P (REMOTE RS-422A)

< DIODE >

D001	8-719-062-19	DIODE MA3200WA-TX
D002	8-719-062-19	DIODE MA3200WA-TX
D003	8-719-062-19	DIODE MA3200WA-TX
D004	8-719-062-19	DIODE MA3200WA-TX
D005	8-719-062-19	DIODE MA3200WA-TX
D006	8-719-421-71	DIODE MA132WA-TX
D007	8-719-421-71	DIODE MA132WA-TX

Ref. No.	Part No.	Description	Remark
< FERRITE BEAD >			
FB001	1-500-241-22	FERRITE 0UH	
FB002	1-500-241-22	FERRITE 0UH	
FB003	1-500-241-22	FERRITE 0UH	
FB004	1-500-241-22	FERRITE 0UH	
FB005	1-500-241-22	FERRITE 0UH	
FB006	1-500-241-22	FERRITE 0UH	
< IC >			
IC001	8-759-583-67	IC HD6473837UX-GDX2050	
IC002	8-759-096-87	IC TC7WU04FU(TE12R)	
IC003	8-759-289-43	IC LTC490CS8-E2	
< COIL >			
L001	1-412-029-11	INDUCTOR CHIP 10uH	
< RESISTOR >			
R001	1-216-823-11	METAL CHIP 1.5K 5%	1/16W
R002	1-216-801-11	METAL CHIP 22 5%	1/16W
R003	1-216-815-11	METAL CHIP 330 5%	1/16W
R004	1-216-815-11	METAL CHIP 330 5%	1/16W
R005	1-216-815-11	METAL CHIP 330 5%	1/16W
R006	1-216-823-11	METAL CHIP 1.5K 5%	1/16W
R007	1-216-857-11	METAL CHIP 1M 5%	1/16W
R008	1-216-801-11	METAL CHIP 22 5%	1/16W
R009	1-216-801-11	METAL CHIP 22 5%	1/16W
R010	1-216-833-11	METAL CHIP 10K 5%	1/16W (DSR-40)
R011	1-216-864-11	METAL CHIP 0 5%	1/16W (DSR-40P)
R012	1-216-801-11	METAL CHIP 22 5%	1/16W
R013	1-216-857-11	METAL CHIP 1M 5%	1/16W
R014	1-216-830-11	METAL CHIP 5.6K 5%	1/16W
R015	1-216-833-11	METAL CHIP 10K 5%	1/16W
R016	1-216-833-11	METAL CHIP 10K 5%	1/16W
R018	1-216-864-11	METAL CHIP 0 5%	1/16W

< VIBRATOR >

X001	1-579-125-11	VIBRATOR, CERAMIC (8MHz)
X002	1-567-870-11	OSCILLATOR, CERAMIC (614kHz)

\* A-7067-206-A VA-106 BOARD, COMPLETE (DSR-40)  
 \* A-7067-208-A VA-106 BOARD, COMPLETE (DSR-40P)

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(Ref.No. 10,000 Series)

< CAPACITOR >

C001	1-124-778-00	ELECT CHIP 22uF 20%	6.3V
C002	1-162-927-11	CERAMIC CHIP 100PF 5%	50V (DSR-40)
C002	1-162-926-11	CERAMIC CHIP 82PF 5%	50V (DSR-40P)
C003	1-162-928-11	CERAMIC CHIP 120PF 5%	50V (DSR-40)
C003	1-162-927-11	CERAMIC CHIP 100PF 5%	50V (DSR-40P)
C004	1-162-927-11	CERAMIC CHIP 100PF 5%	50V (DSR-40)



**VA-106**

Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
C004	1-162-926-11	CERAMIC CHIP 82PF	5% 50V (DSR-40P)	C226	1-126-205-11	ELECT CHIP 47uF	20% 6.3V
C005	1-162-919-11	CERAMIC CHIP 22PF	5% 50V (DSR-40)	C227	1-162-915-11	CERAMIC CHIP 10PF	0.5PF 50V
C005	1-162-918-11	CERAMIC CHIP 18PF	5% 50V (DSR-40P)	C229	1-164-360-11	CERAMIC CHIP 0.1uF	16V
C006	1-164-816-11	CERAMIC CHIP 220PF	2% 50V (DSR-40)	C230	1-162-970-11	CERAMIC CHIP 0.01uF	10% 25V
C006	1-164-218-11	CERAMIC CHIP 180PF	0.25PF 50V (DSR-40P)	C231	1-124-778-00	ELECT CHIP 22uF	20% 6.3V
C007	1-164-156-11	CERAMIC CHIP 0.1uF	25V	C232	1-164-360-11	CERAMIC CHIP 0.1uF	16V
C008	1-164-156-11	CERAMIC CHIP 0.1uF	25V	C233	1-164-360-11	CERAMIC CHIP 0.1uF	16V
C009	1-164-156-11	CERAMIC CHIP 0.1uF	25V	C234	1-164-360-11	CERAMIC CHIP 0.1uF	16V
C010	1-124-778-00	ELECT CHIP 22uF	20% 6.3V	C235	1-164-360-11	CERAMIC CHIP 0.1uF	16V
C011	1-124-778-00	ELECT CHIP 22uF	20% 6.3V	C237	1-124-778-00	ELECT CHIP 22uF	20% 6.3V
C012	1-124-778-00	ELECT CHIP 22uF	20% 6.3V	C238	1-164-360-11	CERAMIC CHIP 0.1uF	16V
C013	1-164-156-11	CERAMIC CHIP 0.1uF	25V	C239	1-124-778-00	ELECT CHIP 22uF	20% 6.3V
C014	1-164-670-11	CERAMIC CHIP 1200PF	5% 16V (DSR-40)	C240	1-128-004-11	ELECT CHIP 10uF	20% 16V
C014	1-164-218-11	CERAMIC CHIP 180PF	0.25PF 50V (DSR-40P)	C241	1-164-360-11	CERAMIC CHIP 0.1uF	16V
C101	1-128-004-11	ELECT CHIP 10uF	20% 16V	C242	1-164-360-11	CERAMIC CHIP 0.1uF	16V
C102	1-164-360-11	CERAMIC CHIP 0.1uF	16V	C243	1-164-360-11	CERAMIC CHIP 0.1uF	16V
C103	1-164-360-11	CERAMIC CHIP 0.1uF	16V	C244	1-164-360-11	CERAMIC CHIP 0.1uF	16V
C104	1-164-360-11	CERAMIC CHIP 0.1uF	16V	C245	1-164-360-11	CERAMIC CHIP 0.1uF	16V
C105	1-164-360-11	CERAMIC CHIP 0.1uF	16V	C246	1-164-360-11	CERAMIC CHIP 0.1uF	16V
C106	1-164-360-11	CERAMIC CHIP 0.1uF	16V	C247	1-128-004-11	ELECT CHIP 10uF	20% 16V
C107	1-164-360-11	CERAMIC CHIP 0.1uF	16V	C248	1-128-003-11	ELECT CHIP 22uF	20% 4V
C108	1-164-360-11	CERAMIC CHIP 0.1uF	16V	C249	1-164-360-11	CERAMIC CHIP 0.1uF	16V
C109	1-164-360-11	CERAMIC CHIP 0.1uF	16V	C250	1-164-360-11	CERAMIC CHIP 0.1uF	16V
C201	1-124-778-00	ELECT CHIP 22uF	20% 6.3V	C251	1-164-360-11	CERAMIC CHIP 0.1uF	16V
C202	1-124-778-00	ELECT CHIP 22uF	20% 6.3V	C252	1-126-205-11	ELECT CHIP 47uF	20% 6.3V
C203	1-126-205-11	ELECT CHIP 47uF	20% 6.3V	C253	1-164-360-11	CERAMIC CHIP 0.1uF	16V
C204	1-128-003-11	ELECT CHIP 22uF	20% 4V	C254	1-164-360-11	CERAMIC CHIP 0.1uF	16V
C205	1-162-970-11	CERAMIC CHIP 0.01uF	10% 25V	C255	1-162-974-11	CERAMIC CHIP 0.01uF	50V
C206	1-162-970-11	CERAMIC CHIP 0.01uF	10% 25V	C256	1-164-360-11	CERAMIC CHIP 0.1uF	16V
C207	1-164-378-11	CERAMIC CHIP 30PF	5% 50V (DSR-40)	C257	1-162-964-11	CERAMIC CHIP 0.001uF	10% 50V
C207	1-162-920-11	CERAMIC CHIP 27PF	5% 50V (DSR-40P)	C258	1-162-970-11	CERAMIC CHIP 0.01uF	10% 25V
C208	1-164-360-11	CERAMIC CHIP 0.1uF	16V	C259	1-164-360-11	CERAMIC CHIP 0.1uF	16V
C209	1-164-360-11	CERAMIC CHIP 0.1uF	16V	C260	1-162-970-11	CERAMIC CHIP 0.01uF	10% 25V
C210	1-164-360-11	CERAMIC CHIP 0.1uF	16V	C261	1-128-006-11	ELECT CHIP 4.7uF	20% 25V
C211	1-162-958-11	CERAMIC CHIP 270PF	5% 50V	C262	1-164-360-11	CERAMIC CHIP 0.1uF	16V
C212	1-126-205-11	ELECT CHIP 47uF	20% 6.3V	C263	1-162-911-11	CERAMIC CHIP 6PF	0.5PF 50V (DSR-40)
C213	1-162-923-11	CERAMIC CHIP 47PF	5% 50V	C263	1-162-910-11	CERAMIC CHIP 5PF	0.25PF 50V (DSR-40P)
C214	1-162-917-11	CERAMIC CHIP 15PF	5% 50V (DSR-40)	C264	1-164-360-11	CERAMIC CHIP 0.1uF	16V
C214	1-162-916-11	CERAMIC CHIP 12PF	5% 50V (DSR-40P)	C265	1-164-360-11	CERAMIC CHIP 0.1uF	16V
C215	1-124-778-00	ELECT CHIP 22uF	20% 6.3V	C266	1-164-360-11	CERAMIC CHIP 0.1uF	16V
C216	1-124-778-00	ELECT CHIP 22uF	20% 6.3V	C267	1-162-927-11	CERAMIC CHIP 100PF	5% 50V
C217	1-128-003-11	ELECT CHIP 22uF	20% 4V	C268	1-162-970-11	CERAMIC CHIP 0.01uF	10% 25V
C218	1-164-360-11	CERAMIC CHIP 0.1uF	16V	C269	1-162-970-11	CERAMIC CHIP 0.01uF	10% 25V
C219	1-128-003-11	ELECT CHIP 22uF	20% 4V	C270	1-164-360-11	CERAMIC CHIP 0.1uF	16V
C220	1-162-970-11	CERAMIC CHIP 0.01uF	10% 25V	C271	1-128-003-11	ELECT CHIP 22uF	20% 4V
C221	1-128-003-11	ELECT CHIP 22uF	20% 4V	C272	1-164-378-11	CERAMIC CHIP 30PF	5% 50V (DSR-40)
C222	1-164-360-11	CERAMIC CHIP 0.1uF	16V	C272	1-162-920-11	CERAMIC CHIP 27PF	5% 50V (DSR-40P)
C223	1-164-360-11	CERAMIC CHIP 0.1uF	16V	C273	1-126-205-11	ELECT CHIP 47uF	20% 6.3V
C224	1-162-970-11	CERAMIC CHIP 0.01uF	10% 25V	C274	1-162-917-11	CERAMIC CHIP 15PF	5% 50V (DSR-40)
C225	1-162-970-11	CERAMIC CHIP 0.01uF	10% 25V	C274	1-162-916-11	CERAMIC CHIP 12PF	5% 50V (DSR-40P)
C226	1-126-205-11	ELECT CHIP 47uF	20% 6.3V	C275	1-162-927-11	CERAMIC CHIP 100PF	5% 50V
C227	1-162-915-11	CERAMIC CHIP 10PF	0.5PF 50V	C276	1-164-360-11	CERAMIC CHIP 0.1uF	16V
C229	1-164-360-11	CERAMIC CHIP 0.1uF	16V	C277	1-164-360-11	CERAMIC CHIP 0.1uF	16V
C230	1-162-970-11	CERAMIC CHIP 0.01uF	10% 25V	C278	1-162-919-11	CERAMIC CHIP 22PF	5% 50V
C231	1-124-778-00	ELECT CHIP 22uF	20% 6.3V	C279	1-162-964-11	CERAMIC CHIP 0.001uF	10% 50V

Ref. No.	Part No.	Description			Remark	Ref. No.	Part No.	Description			Remark
C281	1-164-360-11	CERAMIC CHIP	0.1uF		16V	C339	1-126-206-11	ELECT CHIP	100uF	20%	6.3V
C282	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V	C340	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C283	1-115-156-11	CERAMIC CHIP	1uF		10V	C341	1-162-918-11	CERAMIC CHIP	18PF	5%	50V
C284	1-164-360-11	CERAMIC CHIP	0.1uF		16V						
C286	1-113-619-11	CERAMIC CHIP	0.47uF		10V	C343	1-162-928-11	CERAMIC CHIP	120PF	5%	50V
						C344	1-162-926-11	CERAMIC CHIP	82PF	5%	50V
C287	1-164-360-11	CERAMIC CHIP	0.1uF		16V	C345	1-162-926-11	CERAMIC CHIP	82PF	5%	50V
C288	1-124-778-00	ELECT CHIP	22uF	20%	6.3V	C401	1-126-205-11	ELECT CHIP	47uF	20%	6.3V
C289	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V	C402	1-126-205-11	ELECT CHIP	47uF	20%	6.3V
C290	1-164-360-11	CERAMIC CHIP	0.1uF		16V						
C291	1-126-205-11	ELECT CHIP	47uF	20%	6.3V	C403	1-126-205-11	ELECT CHIP	47uF	20%	6.3V
						C404	1-126-205-11	ELECT CHIP	47uF	20%	6.3V
C292	1-164-360-11	CERAMIC CHIP	0.1uF		16V	C405	1-126-205-11	ELECT CHIP	47uF	20%	6.3V
C293	1-165-176-11	CERAMIC CHIP	0.047uF	10%	16V	C406	1-126-205-11	ELECT CHIP	47uF	20%	6.3V
C294	1-128-006-11	ELECT CHIP	4.7uF	20%	25V	C407	1-162-921-11	CERAMIC CHIP	33PF	5%	50V
C295	1-126-206-11	ELECT CHIP	100uF	20%	6.3V						
C296	1-165-176-11	CERAMIC CHIP	0.047uF	10%	16V	C408	1-117-720-11	CERAMIC CHIP	4.7uF		10V
						C409	1-164-360-11	CERAMIC CHIP	0.1uF		16V
C297	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V	C410	1-164-360-11	CERAMIC CHIP	0.1uF		16V
C298	1-128-006-11	ELECT CHIP	4.7uF	20%	25V	C412	1-117-720-11	CERAMIC CHIP	4.7uF		10V
C299	1-164-360-11	CERAMIC CHIP	0.1uF		16V	C414	1-126-205-11	ELECT CHIP	47uF	20%	6.3V
C300	1-162-911-11	CERAMIC CHIP	6PF	0.5PF	50V						
C301	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V (DSR-40)	C416	1-126-205-11	ELECT CHIP	47uF	20%	6.3V
						C417	1-164-360-11	CERAMIC CHIP	0.1uF		16V
C301	1-164-739-11	CERAMIC CHIP	560PF	5%	50V (DSR-40P)	C418	1-117-720-11	CERAMIC CHIP	4.7uF		10V
						C419	1-164-360-11	CERAMIC CHIP	0.1uF		16V
C302	1-164-360-11	CERAMIC CHIP	0.1uF		16V	C420	1-164-360-11	CERAMIC CHIP	0.1uF		16V
C303	1-162-915-11	CERAMIC CHIP	10PF	0.5PF	50V						
C304	1-164-360-11	CERAMIC CHIP	0.1uF		16V	C421	1-164-360-11	CERAMIC CHIP	0.1uF		16V
						C422	1-164-360-11	CERAMIC CHIP	0.1uF		16V
C305	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V	C423	1-164-360-11	CERAMIC CHIP	0.1uF		16V
C306	1-164-360-11	CERAMIC CHIP	0.1uF		16V	C424	1-117-720-11	CERAMIC CHIP	4.7uF		10V
C307	1-128-003-11	ELECT CHIP	22uF	20%	4V	C425	1-164-360-11	CERAMIC CHIP	0.1uF		16V
C308	1-126-206-11	ELECT CHIP	100uF	20%	6.3V						
C309	1-164-360-11	CERAMIC CHIP	0.1uF		16V	C426	1-113-619-11	CERAMIC CHIP	0.47uF		10V
						C427	1-113-619-11	CERAMIC CHIP	0.47uF		10V
C310	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V	C428	1-113-619-11	CERAMIC CHIP	0.47uF		10V
C311	1-164-360-11	CERAMIC CHIP	0.1uF		16V	C429	1-164-360-11	CERAMIC CHIP	0.1uF		16V
C312	1-164-360-11	CERAMIC CHIP	0.1uF		16V	C430	1-164-360-11	CERAMIC CHIP	0.1uF		16V
C313	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V (DSR-40P)						
						C431	1-117-720-11	CERAMIC CHIP	4.7uF		10V
C314	1-124-778-00	ELECT CHIP	22uF	20%	6.3V	C432	1-164-360-11	CERAMIC CHIP	0.1uF		16V
C315	1-124-778-00	ELECT CHIP	22uF	20%	6.3V	C433	1-164-360-11	CERAMIC CHIP	0.1uF		16V
C316	1-128-003-11	ELECT CHIP	22uF	20%	4V	C434	1-164-360-11	CERAMIC CHIP	0.1uF		16V
C317	1-164-360-11	CERAMIC CHIP	0.1uF		16V	C435	1-117-720-11	CERAMIC CHIP	4.7uF		10V
C318	1-164-360-11	CERAMIC CHIP	0.1uF		16V (DSR-40P)						
						C436	1-162-921-11	CERAMIC CHIP	33PF	5%	50V
C319	1-162-927-11	CERAMIC CHIP	100PF	5%	50V (DSR-40P)	C437	1-164-360-11	CERAMIC CHIP	0.1uF		16V
						C438	1-117-720-11	CERAMIC CHIP	4.7uF		10V
C320	1-164-360-11	CERAMIC CHIP	0.1uF		16V	C439	1-164-360-11	CERAMIC CHIP	0.1uF		16V
C321	1-124-778-00	ELECT CHIP	22uF	20%	6.3V	C440	1-164-360-11	CERAMIC CHIP	0.1uF		16V
C322	1-124-778-00	ELECT CHIP	22uF	20%	6.3V						
						C441	1-164-360-11	CERAMIC CHIP	0.1uF		16V
C323	1-124-778-00	ELECT CHIP	22uF	20%	6.3V	C442	1-164-360-11	CERAMIC CHIP	0.1uF		16V
C324	1-124-778-00	ELECT CHIP	22uF	20%	6.3V	C443	1-164-360-11	CERAMIC CHIP	0.1uF		16V
C325	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V	C444	1-164-360-11	CERAMIC CHIP	0.1uF		16V
C326	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V	C445	1-117-720-11	CERAMIC CHIP	4.7uF		10V
C327	1-164-360-11	CERAMIC CHIP	0.1uF		16V (DSR-40P)						
						C446	1-164-360-11	CERAMIC CHIP	0.1uF		16V
C328	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V	C447	1-164-360-11	CERAMIC CHIP	0.1uF		16V
C329	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V	C448	1-164-360-11	CERAMIC CHIP	0.1uF		16V
C330	1-128-004-11	ELECT CHIP	10uF	20%	16V (DSR-40P)	C449	1-164-156-11	CERAMIC CHIP	0.1uF		25V (DSR-40P)
C331	1-164-360-11	CERAMIC CHIP	0.1uF		16V (DSR-40P)	C450	1-117-720-11	CERAMIC CHIP	4.7uF		10V
						C451	1-164-360-11	CERAMIC CHIP	0.1uF		16V
C332	1-126-205-11	ELECT CHIP	47uF	20%	6.3V	C452	1-164-360-11	CERAMIC CHIP	0.1uF		16V
C338	1-164-360-11	CERAMIC CHIP	0.1uF		16V	C453	1-117-720-11	CERAMIC CHIP	4.7uF		10V
						C454	1-164-360-11	CERAMIC CHIP	0.1uF		16V
						C455	1-164-360-11	CERAMIC CHIP	0.1uF		16V
						C456	1-164-360-11	CERAMIC CHIP	0.1uF		16V

# VA-106

Ref. No.	Part No.	Description	Remark
C457	1-117-720-11	CERAMIC CHIP 4.7uF	10V
C458	1-164-360-11	CERAMIC CHIP 0.1uF	16V
C459	1-164-360-11	CERAMIC CHIP 0.1uF	16V
C460	1-117-720-11	CERAMIC CHIP 4.7uF	10V
C461	1-164-156-11	CERAMIC CHIP 0.1uF	25V
C462	1-164-156-11	CERAMIC CHIP 0.1uF	25V
C463	1-126-205-11	ELECT CHIP 47uF	20% 6.3V
C464	1-126-205-11	ELECT CHIP 47uF	20% 6.3V
C465	1-117-720-11	CERAMIC CHIP 4.7uF	10V
C466	1-164-156-11	CERAMIC CHIP 0.1uF	25V
C467	1-117-720-11	CERAMIC CHIP 4.7uF	10V
C468	1-164-360-11	CERAMIC CHIP 0.1uF	16V
C469	1-164-360-11	CERAMIC CHIP 0.1uF	16V
C470	1-164-360-11	CERAMIC CHIP 0.1uF	16V
C471	1-164-360-11	CERAMIC CHIP 0.1uF	16V
C472	1-117-720-11	CERAMIC CHIP 4.7uF	10V
C473	1-117-720-11	CERAMIC CHIP 4.7uF	10V
C474	1-128-007-11	ELECT CHIP 2.2uF	20% 35V
C475	1-162-970-11	CERAMIC CHIP 0.01uF	10% 25V
C476	1-164-360-11	CERAMIC CHIP 0.1uF	16V
C477	1-164-156-11	CERAMIC CHIP 0.1uF	25V
C478	1-164-156-11	CERAMIC CHIP 0.1uF	25V
C479	1-117-720-11	CERAMIC CHIP 4.7uF	10V (DSR-40P)
C480	1-117-720-11	CERAMIC CHIP 4.7uF	10V
C481	1-124-778-00	ELECT CHIP 22uF	20% 6.3V
C482	1-162-959-11	CERAMIC CHIP 330PF	5% 50V
C483	1-164-156-11	CERAMIC CHIP 0.1uF	25V
C484	1-164-156-11	CERAMIC CHIP 0.1uF	25V
C485	1-162-970-11	CERAMIC CHIP 0.01uF	10% 25V
C486	1-164-156-11	CERAMIC CHIP 0.1uF	25V
C487	1-124-779-00	ELECT CHIP 10uF	20% 16V
C488	1-115-156-11	CERAMIC CHIP 1uF	10V
C489	1-164-360-11	CERAMIC CHIP 0.1uF	16V
C490	1-164-156-11	CERAMIC CHIP 0.1uF	25V
C491	1-164-343-11	CERAMIC CHIP 0.056uF	10% 25V
C492	1-164-156-11	CERAMIC CHIP 0.1uF	25V
C493	1-124-779-00	ELECT CHIP 10uF	20% 16V
C494	1-163-139-00	CERAMIC CHIP 820PF	5% 50V
C495	1-124-778-00	ELECT CHIP 22uF	20% 6.3V
C496	1-164-156-11	CERAMIC CHIP 0.1uF	25V
C497	1-164-227-11	CERAMIC CHIP 0.022uF	10% 25V
C498	1-124-779-00	ELECT CHIP 10uF	20% 16V
C499	1-164-156-11	CERAMIC CHIP 0.1uF	25V
C501	1-126-205-11	ELECT CHIP 47uF	20% 6.3V
C502	1-164-360-11	CERAMIC CHIP 0.1uF	16V
C503	1-164-156-11	CERAMIC CHIP 0.1uF	25V
C504	1-162-970-11	CERAMIC CHIP 0.01uF	10% 25V
C505	1-126-205-11	ELECT CHIP 47uF	20% 6.3V
C506	1-162-964-11	CERAMIC CHIP 0.001uF	10% 50V
C507	1-162-908-11	CERAMIC CHIP 3PF	0.5PF 50V
C508	1-162-919-11	CERAMIC CHIP 22PF	5% 50V
C509	1-162-922-11	CERAMIC CHIP 39PF	5% 50V
C510	1-164-360-11	CERAMIC CHIP 0.1uF	16V
C511	1-164-360-11	CERAMIC CHIP 0.1uF	16V
C512	1-164-360-11	CERAMIC CHIP 0.1uF	16V
C513	1-162-921-11	CERAMIC CHIP 33PF	5% 50V
C514	1-162-919-11	CERAMIC CHIP 22PF	5% 50V
C515	1-164-360-11	CERAMIC CHIP 0.1uF	16V
C516	1-128-004-11	ELECT CHIP 10uF	20% 16V

Ref. No.	Part No.	Description	Remark
C517	1-128-003-11	ELECT CHIP 22uF	20% 4V
C518	1-164-156-11	CERAMIC CHIP 0.1uF	25V
C519	1-164-156-11	CERAMIC CHIP 0.1uF	25V
C520	1-164-156-11	CERAMIC CHIP 0.1uF	25V
C521	1-164-156-11	CERAMIC CHIP 0.1uF	25V
C522	1-126-205-11	ELECT CHIP 47uF	20% 6.3V
C523	1-126-205-11	ELECT CHIP 47uF	20% 6.3V
C524	1-126-205-11	ELECT CHIP 47uF	20% 6.3V
C525	1-126-205-11	ELECT CHIP 47uF	20% 6.3V
C526	1-164-360-11	CERAMIC CHIP 0.1uF	16V
C527	1-164-360-11	CERAMIC CHIP 0.1uF	16V
C528	1-164-360-11	CERAMIC CHIP 0.1uF	16V
C529	1-162-923-11	CERAMIC CHIP 47PF	5% 50V
C530	1-126-205-11	ELECT CHIP 47uF	20% 6.3V
C531	1-126-205-11	ELECT CHIP 47uF	20% 6.3V
C532	1-126-205-11	ELECT CHIP 47uF	20% 6.3V
C533	1-164-360-11	CERAMIC CHIP 0.1uF	16V
C534	1-164-360-11	CERAMIC CHIP 0.1uF	16V
C535	1-164-360-11	CERAMIC CHIP 0.1uF	16V
C536	1-164-360-11	CERAMIC CHIP 0.1uF	16V
C537	1-164-360-11	CERAMIC CHIP 0.1uF	16V
C538	1-164-360-11	CERAMIC CHIP 0.1uF	16V
C539	1-164-360-11	CERAMIC CHIP 0.1uF	16V
C540	1-164-360-11	CERAMIC CHIP 0.1uF	16V
C541	1-164-360-11	CERAMIC CHIP 0.1uF	16V
C542	1-164-360-11	CERAMIC CHIP 0.1uF	16V
C543	1-164-360-11	CERAMIC CHIP 0.1uF	16V
C544	1-164-360-11	CERAMIC CHIP 0.1uF	16V
C545	1-164-360-11	CERAMIC CHIP 0.1uF	16V
C601	1-124-778-00	ELECT CHIP 22uF	20% 6.3V
C602	1-162-970-11	CERAMIC CHIP 0.01uF	10% 25V
C603	1-128-004-11	ELECT CHIP 10uF	20% 16V
C604	1-115-156-11	CERAMIC CHIP 1uF	10V
C606	1-128-004-11	ELECT CHIP 10uF	20% 16V
C608	1-128-004-11	ELECT CHIP 10uF	20% 16V
C612	1-162-920-11	CERAMIC CHIP 27PF	5% 50V (DSR-40)
C612	1-162-921-11	CERAMIC CHIP 33PF	5% 50V (DSR-40P)
C613	1-162-915-11	CERAMIC CHIP 10PF	0.5PF 50V
C614	1-162-915-11	CERAMIC CHIP 10PF	0.5PF 50V
C615	1-162-917-11	CERAMIC CHIP 15PF	5% 50V (DSR-40)
C616	1-124-778-00	ELECT CHIP 22uF	20% 6.3V
C618	1-162-970-11	CERAMIC CHIP 0.01uF	10% 25V
C619	1-124-778-00	ELECT CHIP 22uF	20% 6.3V
C621	1-162-970-11	CERAMIC CHIP 0.01uF	10% 25V
C624	1-164-360-11	CERAMIC CHIP 0.1uF	16V
C628	1-164-360-11	CERAMIC CHIP 0.1uF	16V
C629	1-162-957-11	CERAMIC CHIP 220PF	5% 50V
C630	1-128-004-11	ELECT CHIP 10uF	20% 16V
C631	1-164-360-11	CERAMIC CHIP 0.1uF	16V
C651	1-128-003-11	ELECT CHIP 22uF	20% 4V
C652	1-162-927-11	CERAMIC CHIP 100PF	5% 50V
C653	1-126-205-11	ELECT CHIP 47uF	20% 6.3V
C654	1-162-928-11	CERAMIC CHIP 120PF	5% 50V
C655	1-162-927-11	CERAMIC CHIP 100PF	5% 50V
C656	1-126-205-11	ELECT CHIP 47uF	20% 6.3V
C657	1-162-970-11	CERAMIC CHIP 0.01uF	10% 25V
C658	1-164-360-11	CERAMIC CHIP 0.1uF	16V

Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
C659	1-162-970-11	CERAMIC CHIP	0.01uF 10% 25V	C889	1-164-360-11	CERAMIC CHIP	0.1uF 16V
C660	1-128-007-11	ELECT CHIP	2.2uF 20% 35V	C891	1-164-360-11	CERAMIC CHIP	0.1uF 16V
C661	1-126-205-11	ELECT CHIP	47uF 20% 6.3V	C892	1-128-004-11	ELECT CHIP	10uF 20% 16V
C662	1-162-908-11	CERAMIC CHIP	3PF 0.5PF 50V	C893	1-164-360-11	CERAMIC CHIP	0.1uF 16V
C663	1-162-922-11	CERAMIC CHIP	39PF 5% 50V	C894	1-164-360-11	CERAMIC CHIP	0.1uF 16V
C664	1-162-919-11	CERAMIC CHIP	22PF 5% 50V	C895	1-126-392-11	ELECT CHIP	100uF 20% 6.3V
C665	1-162-970-11	CERAMIC CHIP	0.01uF 10% 25V	C896	1-165-176-11	CERAMIC CHIP	0.047uF 10% 16V
C667	1-162-970-11	CERAMIC CHIP	0.01uF 10% 25V	C897	1-164-360-11	CERAMIC CHIP	0.1uF 16V
C668	1-115-156-11	CERAMIC CHIP	1uF 10V	C898	1-126-392-11	ELECT CHIP	100uF 20% 6.3V
C669	1-162-921-11	CERAMIC CHIP	33PF 5% 50V	C899	1-126-206-11	ELECT CHIP	100uF 20% 6.3V
C670	1-164-343-11	CERAMIC CHIP	0.056uF 10% 25V	C900	1-126-396-11	ELECT CHIP	47uF 20% 16V
C671	1-162-919-11	CERAMIC CHIP	22PF 5% 50V	C901	1-126-396-11	ELECT CHIP	47uF 20% 16V
C672	1-163-139-00	CERAMIC CHIP	820PF 5% 50V	C902	1-164-360-11	CERAMIC CHIP	0.1uF 16V
C673	1-164-227-11	CERAMIC CHIP	0.022uF 10% 25V	C903	1-164-360-11	CERAMIC CHIP	0.1uF 16V
C674	1-128-003-11	ELECT CHIP	22uF 20% 4V	C904	1-164-360-11	CERAMIC CHIP	0.1uF 16V
C675	1-162-970-11	CERAMIC CHIP	0.01uF 10% 25V	C906	1-164-360-11	CERAMIC CHIP	0.1uF 16V
C676	1-128-003-11	ELECT CHIP	22uF 20% 4V	C907	1-164-360-11	CERAMIC CHIP	0.1uF 16V
C677	1-117-720-11	CERAMIC CHIP	4.7uF 10V	C908	1-164-360-11	CERAMIC CHIP	0.1uF 16V
C678	1-164-360-11	CERAMIC CHIP	0.1uF 16V	C1121	1-107-826-91	CERAMIC CHIP	0.1uF 10% 16V
C679	1-164-360-11	CERAMIC CHIP	0.1uF 16V	C1125	1-107-826-91	CERAMIC CHIP	0.1uF 10% 16V
C680	1-117-720-11	CERAMIC CHIP	4.7uF 10V	C1126	1-107-826-91	CERAMIC CHIP	0.1uF 10% 16V
C681	1-126-206-11	ELECT CHIP	100uF 20% 6.3V	C1128	1-126-206-11	ELECT CHIP	100uF 20% 6.3V
C682	1-164-360-11	CERAMIC CHIP	0.1uF 16V	< CONNECTOR >			
C851	1-126-393-11	ELECT CHIP	33uF 20% 10V	CN001	1-774-770-11	CONNECTOR, FFC/FPC 30P	
C852	1-164-360-11	CERAMIC CHIP	0.1uF 16V	CN101	1-774-770-11	CONNECTOR, FFC/FPC 30P	
C853	1-164-360-11	CERAMIC CHIP	0.1uF 16V	CN102	1-774-770-11	CONNECTOR, FFC/FPC 30P	
C854	1-164-360-11	CERAMIC CHIP	0.1uF 16V	CN401	1-784-225-11	CONNECTOR, FFC/FPC 26P	
C855	1-162-964-11	CERAMIC CHIP	0.001uF 10% 50V	* CN601	1-564-005-11	PIN, CONNECTOR 6P	
C856	1-162-964-11	CERAMIC CHIP	0.001uF 10% 50V	CN602	1-779-369-11	CONNECTOR, SQUARE TYPE(INDI)4P (DV IN/OUT)	
C857	1-164-360-11	CERAMIC CHIP	0.1uF 16V	CN851	1-774-770-11	CONNECTOR, FFC/FPC 30P	
C858	1-162-970-11	CERAMIC CHIP	0.01uF 10% 25V	CN852	1-770-305-11	CONNECTOR, FFC/FPC 10P	
C859	1-164-360-11	CERAMIC CHIP	0.1uF 16V	* CN855	1-568-788-21	PIN, CONNECTOR 11P	
C860	1-128-013-11	ELECT CHIP	1uF 20% 50V	CN856	1-779-344-11	CONNECTOR, FFC/FPC 20P	
C861	1-128-013-11	ELECT CHIP	1uF 20% 50V	< TRIMMER >			
C862	1-162-927-11	CERAMIC CHIP	100PF 5% 50V	CT201	1-141-424-11	CAP, ADJ (DECODER FREERUN)	
C863	1-164-360-11	CERAMIC CHIP	0.1uF 16V	< DIODE >			
C864	1-164-360-11	CERAMIC CHIP	0.1uF 16V	D201	8-719-073-01	DIODE MA111-(K8).SO	
C865	1-126-204-11	ELECT CHIP	47uF 20% 16V	D202	8-719-073-01	DIODE MA111-(K8).SO	
C866	1-164-360-11	CERAMIC CHIP	0.1uF 16V	D401	8-719-073-01	DIODE MA111-(K8).SO	
C867	1-164-360-11	CERAMIC CHIP	0.1uF 16V	D402	8-719-073-01	DIODE MA111-(K8).SO	
C868	1-126-400-11	ELECT	22uF 20% 35V	D403	8-719-002-81	DIODE 1T363-01-T8A	
C869	1-164-360-11	CERAMIC CHIP	0.1uF 16V	D404	8-719-073-01	DIODE MA111-(K8).SO	
C870	1-162-970-11	CERAMIC CHIP	0.01uF 10% 25V	D405	8-719-073-01	DIODE MA111-(K8).SO	
C871	1-162-921-11	CERAMIC CHIP	33PF 5% 50V	D406	8-719-073-01	DIODE MA111-(K8).SO	
C872	1-126-204-11	ELECT CHIP	47uF 20% 16V	D407	8-719-073-01	DIODE MA111-(K8).SO	
C873	1-164-360-11	CERAMIC CHIP	0.1uF 16V	D408	8-719-073-01	DIODE MA111-(K8).SO	
C874	1-164-360-11	CERAMIC CHIP	0.1uF 16V	D651	8-719-002-81	DIODE 1T363-01-T8A	
C875	1-162-970-11	CERAMIC CHIP	0.01uF 10% 25V	D851	8-719-421-59	DIODE MA3075WA-(TX)	
C876	1-162-921-11	CERAMIC CHIP	33PF 5% 50V	D852	8-719-400-71	DIODE MA3082-TX	
C877	1-126-197-11	ELECT CHIP	10uF 20% 50V	D854	8-719-073-01	DIODE MA111-(K8).SO	
C878	1-164-360-11	CERAMIC CHIP	0.1uF 16V	D855	8-719-421-51	DIODE MA738-TX	
C879	1-162-975-11	CERAMIC CHIP	24PF 5% 50V	D856	8-719-073-28	DIODE MA729-(K8).SO	
C881	1-126-204-11	ELECT CHIP	47uF 20% 16V	D857	8-719-073-02	DIODE MA728-(K8).SO	
C882	1-164-360-11	CERAMIC CHIP	0.1uF 16V	D858	8-719-421-51	DIODE MA738-TX	
C883	1-162-970-11	CERAMIC CHIP	0.01uF 10% 25V	D859	8-719-073-01	DIODE MA111-(K8).SO	
C884	1-164-360-11	CERAMIC CHIP	0.1uF 16V	D860	8-719-073-01	DIODE MA111-(K8).SO	
C885	1-164-227-11	CERAMIC CHIP	0.022uF 10% 25V				
C886	1-126-206-11	ELECT CHIP	100uF 20% 6.3V				
C887	1-104-905-11	CAPACITOR	0.22F 5.5V				
C888	1-126-927-11	ELECT	1000uF 20% 6.3V				

Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
D862	8-719-400-56	DIODE MA3062H-TX		IC210	8-759-711-62	IC NJM2240M(Te2)	
D863	8-719-421-59	DIODE MA3075WA-(TX)		IC211	8-752-352-20	IC CXD2023Q (DSR-40)	
		< DELAY LINE >		IC211	8-752-372-78	IC CXD2024AQ-TL (DSR-40P)	
DL201	1-411-661-11	LINE, LC DELAY		IC212	8-759-498-27	IC TK16074MTL	
DL202	1-415-551-11	DELAY LINE 140NS		IC213	8-759-603-54	IC M51271FP-70AD	
DL401	1-415-551-11	DELAY LINE 140NS		IC214	8-752-054-80	IC CXA1521M-T4	
DL402	1-415-551-11	DELAY LINE 140NS		IC215	8-759-449-58	IC LM7131BCM5X	
DL403	1-415-551-11	DELAY LINE 140NS		IC216	8-759-239-58	IC TC74HC221AF(EL) (DSR-40P)	
		< FERRITE BEAD >		IC217	8-759-324-99	IC MM1118XFBE	
FB401	1-414-445-11	FERRITE 0UH		IC218	8-759-449-58	IC LM7131BCM5X	
FB402	1-414-445-11	FERRITE 0UH		IC219	8-759-058-54	IC TC7S00FU(Te85R) (DSR-40P)	
FB403	1-414-445-11	FERRITE 0UH		IC401	8-759-449-58	IC LM7131BCM5X	
FB404	1-414-445-11	FERRITE 0UH		IC402	8-759-498-27	IC TK16074MTL	
FB405	1-414-445-11	FERRITE 0UH		IC403	8-759-498-27	IC TK16074MTL	
FB406	1-414-445-11	FERRITE 0UH		IC404	8-759-337-26	IC MM1115XFBE	
FB407	1-414-445-11	FERRITE 0UH		IC405	8-759-432-78	IC MM1111XFBE	
FB408	1-414-445-11	FERRITE 0UH		IC406	8-759-432-78	IC MM1111XFBE	
FB409	1-414-445-11	FERRITE 0UH		IC407	8-752-054-80	IC CXA1521M-T4	
FB410	1-414-445-11	FERRITE 0UH		IC408	8-752-052-73	IC CXA1451M-T4	
FB411	1-414-445-11	FERRITE 0UH		IC409	8-752-052-73	IC CXA1451M-T4	
FB412	1-414-445-11	FERRITE 0UH		IC410	8-752-052-73	IC CXA1451M-T4	
FB651	1-414-445-11	FERRITE 0UH		IC411	8-752-054-80	IC CXA1521M-T4	
FB652	1-414-445-11	FERRITE 0UH		IC412	8-759-449-58	IC LM7131BCM5X	
FB851	1-543-948-22	FERRITE 0UH		IC413	8-759-449-58	IC LM7131BCM5X	
FB852	1-543-948-22	FERRITE 0UH		IC414	8-759-449-58	IC LM7131BCM5X	
FB853	1-543-948-22	FERRITE 0UH		IC415	8-752-052-73	IC CXA1451M-T4	
		< FILTER >		IC416	8-752-054-80	IC CXA1521M-T4 (DSR-40P)	
FL201	1-236-925-11	FILTER, LOW PASS		IC417	8-752-052-73	IC CXA1451M-T4	
FL202	1-236-926-11	FILTER, BAND PASS (DSR-40)		IC418	8-759-449-58	IC LM7131BCM5X	
FL202	1-239-153-11	FILTER, BAND PASS (DSR-40P)		IC419	8-752-052-73	IC CXA1451M-T4	
FL203	1-233-501-11	FILTER, LOW PASS		IC420	8-752-053-21	IC CXA1211M-T4	
FL204	1-233-500-11	FILTER, LOW PASS		IC421	8-759-449-58	IC LM7131BCM5X	
FL205	1-233-501-11	FILTER, LOW PASS		IC422	8-759-603-56	IC M51272FP-TE2	
FL401	1-235-786-11	FILTER, LOW PASS (3MHz) (DSR-40)		IC423	8-759-164-09	IC LA7218M-TE-R	
FL401	1-235-584-11	FILTER, LOW PASS (DSR-40P)		IC424	8-759-031-84	IC TC7S04F(Te85R)	
FL402	1-235-584-11	FILTER, LOW PASS		IC425	8-759-483-56	IC MB90089PF-G-196-BND-ER	
FL403	1-235-161-00	FILTER, BAND PASS (DSR-40)		IC426	8-759-449-58	IC LM7131BCM5X	
FL403	1-235-181-00	FILTER, BAND PASS (DSR-40P)		IC427	8-752-054-80	IC CXA1521M-T4	
		< IC >		IC428	8-752-054-80	IC CXA1521M-T4	
IC001	8-759-446-66	IC MM1113XFBE		IC429	8-752-054-80	IC CXA1521M-T4	
IC002	8-759-446-66	IC MM1113XFBE		IC430	8-759-449-58	IC LM7131BCM5X	
IC101	8-759-523-81	IC TC74VHCT08FT(EL)		IC602	8-759-349-01	IC MC68HC68VBIFB	
IC102	8-759-327-60	IC TC7W125FU-TE12R		IC651	8-759-368-82	IC MB90089PF-G-155-BND-ER	
IC103	8-759-524-04	IC TC74VHC125FT(EL)		IC652	8-759-164-09	IC LA7218M-TE-R	
IC104	8-759-491-47	IC TC74VHCT08AFT(EL)		IC653	8-759-337-26	IC MM1115XFBE	
IC105	8-759-491-47	IC TC74VHCT08AFT(EL)		IC654	8-752-052-73	IC CXA1451M-T4	
IC106	8-759-491-47	IC TC74VHCT08AFT(EL)		IC851	8-759-356-27	IC NJM2129M-TE2	
IC201	8-759-337-26	IC MM1115XFBE		IC853	8-759-363-18	IC TC7ST04FU(Te85R)	
IC202	8-759-433-44	IC MM1031XML		IC854	8-759-570-40	IC S579191PJ	
IC203	8-759-337-26	IC MM1115XFBE		IC855	8-759-523-02	IC TC74HC4053AFT(EL)	
IC204	8-759-498-27	IC TK16074MTL		IC856	8-759-445-93	IC AK6440AM-E2	
IC205	8-759-432-78	IC MM1111XFBE		IC857	1-473-301-11	IC CONVERTER UNIT, DC/DC	
IC206	8-752-054-80	IC CXA1521M-T4		IC858	8-759-538-14	IC S-3513BEFS-TB	
IC207	8-759-498-27	IC TK16074MTL		IC859	8-759-248-87	IC MM1256XF-BE	
IC208	8-752-054-80	IC CXA1521M-T4		IC860	8-759-536-72	IC TL1596CPWR	
IC209	8-759-449-58	IC LM7131BCM5X		IC861	8-759-822-95	IC L79M05T-FA-TL	
				IC862	8-759-157-22	IC PQ05TZ1U	
				IC1105	8-759-635-27	IC M62352GP-75ED	
				IC1110	8-759-635-27	IC M62352GP-75ED	
				IC1114	8-759-635-27	IC M62352GP-75ED	

Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
IC1115	8-759-234-20	IC TC7S08F(TE85R)		L655	1-410-385-11	INDUCTOR CHIP 22uH	
IC1116	8-759-234-20	IC TC7S08F(TE85R)		L656	1-412-029-11	INDUCTOR CHIP 10uH	
		< JACK >		L851	1-412-026-11	INDUCTOR CHIP 1uH	
J851	1-573-798-11	JACK, MINIATURE (DIA. 3.5) (CONTROL S)		L852	1-412-026-11	INDUCTOR CHIP 1uH	
J852	1-691-258-21	JACK (LANC)		L853	1-412-031-11	INDUCTOR CHIP 47uH	
		< COIL >		L854	1-412-029-11	INDUCTOR CHIP 10uH	
				L857	1-412-029-11	INDUCTOR CHIP 10uH	
				L858	1-412-029-11	INDUCTOR CHIP 10uH	
						< TRANSISTOR >	
L001	1-412-955-11	INDUCTOR 22uH (DSR-40)		Q001	8-729-905-35	TRANSISTOR 2SC4081T106R	
L001	1-410-384-31	INDUCTOR CHIP 18uH (DSR-40P)		Q002	8-729-905-35	TRANSISTOR 2SC4081T106R	
L002	1-412-955-11	INDUCTOR 22uH (DSR-40)		Q003	8-729-905-35	TRANSISTOR 2SC4081T106R	
L002	1-410-384-31	INDUCTOR CHIP 18uH (DSR-40P)		Q004	8-729-905-35	TRANSISTOR 2SC4081T106R	
L003	1-412-963-11	INDUCTOR 100uH (DSR-40)		Q101	8-729-015-76	TRANSISTOR UN5211-TX	
L003	1-410-392-11	INDUCTOR CHIP 82uH (DSR-40P)		Q102	8-729-015-76	TRANSISTOR UN5211-TX	
L004	1-414-398-11	INDUCTOR 10uH (DSR-40)		Q103	8-729-015-76	TRANSISTOR UN5211-TX	
L004	1-410-380-31	INDUCTOR CHIP 8.2uH (DSR-40P)		Q201	8-729-905-35	TRANSISTOR 2SC4081T106R	
L201	1-412-029-11	INDUCTOR CHIP 10uH		Q202	8-729-905-35	TRANSISTOR 2SC4081T106R	
L202	1-412-953-11	INDUCTOR 15uH (DSR-40)		Q203	8-729-905-35	TRANSISTOR 2SC4081T106R	
L202	1-412-952-11	INDUCTOR 12uH (DSR-40P)		Q204	8-729-402-84	TRANSISTOR XN4601-TW	
L203	1-410-381-11	INDUCTOR CHIP 10uH		Q205	8-729-905-35	TRANSISTOR 2SC4081T106R	
L204	1-412-950-11	INDUCTOR 8.2uH (DSR-40)		Q206	8-729-905-35	TRANSISTOR 2SC4081T106R	
L204	1-412-949-21	INDUCTOR 6.8uH (DSR-40P)		Q207	8-729-026-52	TRANSISTOR 2SA1576A-T106-R	
L205	1-412-029-11	INDUCTOR CHIP 10uH		Q208	8-729-905-35	TRANSISTOR 2SC4081T106R	
L206	1-412-029-11	INDUCTOR CHIP 10uH		Q209	8-729-026-52	TRANSISTOR 2SA1576A-T106-R	
L207	1-412-029-11	INDUCTOR CHIP 10uH		Q210	8-729-427-83	TRANSISTOR XP6501-TXE	
L208	1-412-029-11	INDUCTOR CHIP 10uH		Q211	8-729-905-35	TRANSISTOR 2SC4081T106R	
L209	1-410-381-11	INDUCTOR CHIP 10uH		Q212	8-729-905-35	TRANSISTOR 2SC4081T106R	
L210	1-412-953-11	INDUCTOR 15uH (DSR-40)		Q213	8-729-026-52	TRANSISTOR 2SA1576A-T106-R	
L210	1-412-952-11	INDUCTOR 12uH (DSR-40P)		Q214	8-729-026-52	TRANSISTOR 2SA1576A-T106-R	
L211	1-412-950-11	INDUCTOR 8.2uH (DSR-40)		Q215	8-729-026-52	TRANSISTOR 2SA1576A-T106-R	
L211	1-412-949-21	INDUCTOR 6.8uH (DSR-40P)		Q216	8-729-905-35	TRANSISTOR 2SC4081T106R	
L212	1-412-808-21	INDUCTOR 470uH		Q217	8-729-905-35	TRANSISTOR 2SC4081T106R	
L214	1-412-031-11	INDUCTOR CHIP 47uH		Q218	8-729-905-35	TRANSISTOR 2SC4081T106R	
L215	1-412-029-11	INDUCTOR CHIP 10uH		Q219	8-729-026-52	TRANSISTOR 2SA1576A-T106-R	
L216	1-412-029-11	INDUCTOR CHIP 10uH		Q220	8-729-905-35	TRANSISTOR 2SC4081T106R	
L217	1-412-029-11	INDUCTOR CHIP 10uH		Q221	8-729-905-35	TRANSISTOR 2SC4081T106R	
L218	1-412-029-11	INDUCTOR CHIP 10uH		Q222	8-729-905-35	TRANSISTOR 2SC4081T106R	
L219	1-412-029-11	INDUCTOR CHIP 10uH (DSR-40P)		Q223	8-729-026-52	TRANSISTOR 2SA1576A-T106-R	
L401	1-412-029-11	INDUCTOR CHIP 10uH		Q224	8-729-905-35	TRANSISTOR 2SC4081T106R	
L402	1-412-029-11	INDUCTOR CHIP 10uH		Q225	8-729-905-35	TRANSISTOR 2SC4081T106R	
L403	1-412-029-11	INDUCTOR CHIP 10uH		Q226	8-729-402-84	TRANSISTOR XN4601-TW	
L404	1-412-029-11	INDUCTOR CHIP 10uH		Q227	8-729-905-35	TRANSISTOR 2SC4081T106R	
L405	1-412-030-11	INDUCTOR CHIP 22uH		Q228	8-729-905-35	TRANSISTOR 2SC4081T106R	
L406	1-412-026-11	INDUCTOR CHIP 1uH		Q229	8-729-905-35	TRANSISTOR 2SC4081T106R	
L407	1-412-034-11	INDUCTOR CHIP 330uH		Q230	8-729-905-35	TRANSISTOR 2SC4081T106R	
L408	1-410-385-11	INDUCTOR CHIP 22uH		Q231	8-729-905-35	TRANSISTOR 2SC4081T106R	
L409	1-412-029-11	INDUCTOR CHIP 10uH		Q232	8-729-026-52	TRANSISTOR 2SA1576A-T106-R	
L410	1-412-029-11	INDUCTOR CHIP 10uH		Q233	8-729-905-35	TRANSISTOR 2SC4081T106R	
L411	1-412-029-11	INDUCTOR CHIP 10uH		Q234	8-729-905-35	TRANSISTOR 2SC4081T106R	
L412	1-412-029-11	INDUCTOR CHIP 10uH		Q235	8-729-026-52	TRANSISTOR 2SA1576A-T106-R	
L413	1-412-029-11	INDUCTOR CHIP 10uH		Q236	8-729-026-52	TRANSISTOR 2SA1576A-T106-R	
L601	1-412-029-11	INDUCTOR CHIP 10uH		Q401	8-729-905-35	TRANSISTOR 2SC4081T106R	
L602	1-410-389-31	INDUCTOR CHIP 47uH (DSR-40)		Q402	8-729-905-35	TRANSISTOR 2SC4081T106R	
L602	1-410-388-31	INDUCTOR CHIP 39uH (DSR-40P)		Q403	8-729-905-35	TRANSISTOR 2SC4081T106R	
L603	1-412-029-11	INDUCTOR CHIP 10uH		Q404	8-729-402-84	TRANSISTOR XN4601-TW	
L604	1-412-029-11	INDUCTOR CHIP 10uH		Q405	8-729-402-84	TRANSISTOR XN4601-TW	
L651	1-410-385-11	INDUCTOR CHIP 22uH		Q406	8-729-905-35	TRANSISTOR 2SC4081T106R	
L652	1-410-385-11	INDUCTOR CHIP 22uH		Q407	8-729-905-35	TRANSISTOR 2SC4081T106R	
L653	1-412-029-11	INDUCTOR CHIP 10uH					
L654	1-412-026-11	INDUCTOR CHIP 1uH					

Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
Q408	8-729-905-35	TRANSISTOR	2SC4081T106R	R107	1-216-797-11	METAL CHIP	10 5% 1/16W
Q409	8-729-202-38	TRANSISTOR	2SC3326N-TE85L-AB	R108	1-216-833-11	METAL CHIP	10K 5% 1/16W
Q410	8-729-202-38	TRANSISTOR	2SC3326N-TE85L-AB	R109	1-216-797-11	METAL CHIP	10 5% 1/16W
Q411	8-729-202-38	TRANSISTOR	2SC3326N-TE85L-AB	R110	1-216-797-11	METAL CHIP	10 5% 1/16W
Q412	8-729-402-84	TRANSISTOR	XN4601-TW				
Q413	8-729-402-84	TRANSISTOR	XN4601-TW	R112	1-216-833-11	METAL CHIP	10K 5% 1/16W
Q414	8-729-402-84	TRANSISTOR	XN4601-TW	R113	1-216-864-11	METAL CHIP	0 5% 1/16W
Q415	8-729-402-84	TRANSISTOR	XN4601-TW	R114	1-216-809-11	METAL CHIP	100 5% 1/16W
Q416	8-729-402-84	TRANSISTOR	XN4601-TW	R115	1-216-809-11	METAL CHIP	100 5% 1/16W
Q417	8-729-026-52	TRANSISTOR	2SA1576A-T106-R	R117	1-216-809-11	METAL CHIP	100 5% 1/16W
Q418	8-729-026-52	TRANSISTOR	2SA1576A-T106-R	R118	1-216-797-11	METAL CHIP	10 5% 1/16W
Q419	8-729-402-84	TRANSISTOR	XN4601-TW	R119	1-216-797-11	METAL CHIP	10 5% 1/16W (DSR-40P)
Q420	8-729-402-84	TRANSISTOR	XN4601-TW	R120	1-216-809-11	METAL CHIP	100 5% 1/16W
Q421	8-729-402-84	TRANSISTOR	XN4601-TW	R121	1-216-809-11	METAL CHIP	100 5% 1/16W
Q422	8-729-402-84	TRANSISTOR	XN4601-TW				
Q423	8-729-402-84	TRANSISTOR	XN4601-TW	R122	1-216-809-11	METAL CHIP	100 5% 1/16W
Q424	8-729-402-84	TRANSISTOR	XN4601-TW (DSR-40P)	R123	1-216-809-11	METAL CHIP	100 5% 1/16W
Q425	8-729-905-35	TRANSISTOR	2SC4081T106R	R124	1-216-809-11	METAL CHIP	100 5% 1/16W
Q426	8-729-402-84	TRANSISTOR	XN4601-TW	R125	1-216-809-11	METAL CHIP	100 5% 1/16W
Q427	8-729-402-42	TRANSISTOR	UN5213-TX	R126	1-216-809-11	METAL CHIP	100 5% 1/16W
Q428	8-729-905-35	TRANSISTOR	2SC4081T106R	R127	1-216-797-11	METAL CHIP	10 5% 1/16W
Q429	8-729-026-52	TRANSISTOR	2SA1576A-T106-R	R128	1-216-809-11	METAL CHIP	100 5% 1/16W
Q430	8-729-905-35	TRANSISTOR	2SC4081T106R	R129	1-216-797-11	METAL CHIP	10 5% 1/16W
Q431	8-729-905-35	TRANSISTOR	2SC4081T106R	R130	1-216-809-11	METAL CHIP	100 5% 1/16W
Q432	8-729-905-35	TRANSISTOR	2SC4081T106R	R131	1-216-809-11	METAL CHIP	100 5% 1/16W
Q433	8-729-905-35	TRANSISTOR	2SC4081T106R				
Q601	8-729-905-35	TRANSISTOR	2SC4081T106R	R132	1-216-797-11	METAL CHIP	10 5% 1/16W
Q602	8-729-905-35	TRANSISTOR	2SC4081T106R	R133	1-216-809-11	METAL CHIP	100 5% 1/16W
Q604	8-729-905-35	TRANSISTOR	2SC4081T106R	R135	1-216-809-11	METAL CHIP	100 5% 1/16W
Q605	8-729-905-35	TRANSISTOR	2SC4081T106R	R136	1-216-809-11	METAL CHIP	100 5% 1/16W
Q606	8-729-905-35	TRANSISTOR	2SC4081T106R	R137	1-216-809-11	METAL CHIP	100 5% 1/16W
Q607	8-729-026-52	TRANSISTOR	2SA1576A-T106-R				
Q613	8-729-026-52	TRANSISTOR	2SA1576A-T106-R	R138	1-216-809-11	METAL CHIP	100 5% 1/16W
Q651	8-729-905-35	TRANSISTOR	2SC4081T106R	R139	1-216-809-11	METAL CHIP	100 5% 1/16W
Q652	8-729-905-35	TRANSISTOR	2SC4081T106R	R140	1-216-809-11	METAL CHIP	100 5% 1/16W
Q653	8-729-026-52	TRANSISTOR	2SA1576A-T106-R	R141	1-216-809-11	METAL CHIP	100 5% 1/16W
Q654	8-729-905-35	TRANSISTOR	2SC4081T106R	R142	1-216-809-11	METAL CHIP	100 5% 1/16W
Q851	8-729-905-35	TRANSISTOR	2SC4081T106R				
Q852	8-729-905-35	TRANSISTOR	2SC4081T106R	R143	1-216-809-11	METAL CHIP	100 5% 1/16W
Q853	8-729-905-35	TRANSISTOR	2SC4081T106R	R144	1-216-809-11	METAL CHIP	100 5% 1/16W
Q854	8-729-402-42	TRANSISTOR	UN5213-TX	R145	1-216-809-11	METAL CHIP	100 5% 1/16W
Q855	8-729-014-91	TRANSISTOR	2SD2185S-TX	R146	1-216-797-11	METAL CHIP	10 5% 1/16W
< RESISTOR >				R147	1-216-797-11	METAL CHIP	10 5% 1/16W
R001	1-216-839-11	METAL CHIP	33K 5% 1/16W	R148	1-216-797-11	METAL CHIP	10 5% 1/16W
R002	1-216-829-11	METAL CHIP	4.7K 5% 1/16W	R152	1-216-833-11	METAL CHIP	10K 5% 1/16W
R003	1-216-829-11	METAL CHIP	4.7K 5% 1/16W	R153	1-216-833-11	METAL CHIP	10K 5% 1/16W
R004	1-216-821-11	METAL CHIP	1K 5% 1/16W	R154	1-216-833-11	METAL CHIP	10K 5% 1/16W
R005	1-216-821-11	METAL CHIP	1K 5% 1/16W	R156	1-216-809-11	METAL CHIP	100 5% 1/16W
R006	1-216-829-11	METAL CHIP	4.7K 5% 1/16W				
R007	1-216-821-11	METAL CHIP	1K 5% 1/16W	R157	1-216-809-11	METAL CHIP	100 5% 1/16W
R008	1-216-821-11	METAL CHIP	1K 5% 1/16W	R158	1-216-809-11	METAL CHIP	100 5% 1/16W
R009	1-216-813-11	METAL CHIP	220 5% 1/16W	R159	1-216-809-11	METAL CHIP	100 5% 1/16W
R010	1-216-829-11	METAL CHIP	4.7K 5% 1/16W	R160	1-216-809-11	METAL CHIP	100 5% 1/16W
R101	1-216-797-11	METAL CHIP	10 5% 1/16W	R161	1-216-809-11	METAL CHIP	100 5% 1/16W
R102	1-216-797-11	METAL CHIP	10 5% 1/16W				
R103	1-216-833-11	METAL CHIP	10K 5% 1/16W	R162	1-216-809-11	METAL CHIP	100 5% 1/16W
R104	1-216-833-11	METAL CHIP	10K 5% 1/16W	R163	1-216-809-11	METAL CHIP	100 5% 1/16W
R105	1-216-797-11	METAL CHIP	10 5% 1/16W	R164	1-216-809-11	METAL CHIP	100 5% 1/16W
R106	1-216-797-11	METAL CHIP	10 5% 1/16W	R165	1-216-809-11	METAL CHIP	100 5% 1/16W
				R167	1-216-809-11	METAL CHIP	100 5% 1/16W
				R168	1-216-809-11	METAL CHIP	100 5% 1/16W
				R169	1-216-809-11	METAL CHIP	100 5% 1/16W
				R171	1-216-809-11	METAL CHIP	100 5% 1/16W
				R172	1-216-809-11	METAL CHIP	100 5% 1/16W
				R173	1-216-809-11	METAL CHIP	100 5% 1/16W
				R174	1-216-809-11	METAL CHIP	100 5% 1/16W

Ref. No.	Part No.	Description			Remark	Ref. No.	Part No.	Description			Remark
R175	1-216-809-11	METAL CHIP	100	5%	1/16W	R255	1-216-829-11	METAL CHIP	4.7K	5%	1/16W
R176	1-216-809-11	METAL CHIP	100	5%	1/16W	R256	1-216-825-11	METAL CHIP	2.2K	5%	1/16W
R177	1-216-809-11	METAL CHIP	100	5%	1/16W	R257	1-216-829-11	METAL CHIP	4.7K	5%	1/16W
R178	1-216-809-11	METAL CHIP	100	5%	1/16W	R258	1-216-828-11	METAL CHIP	3.9K	5%	1/16W
R179	1-216-809-11	METAL CHIP	100	5%	1/16W	R259	1-218-841-11	RES,CHIP	560	0.50%	1/16W
R180	1-216-809-11	METAL CHIP	100	5%	1/16W	R260	1-218-877-11	RES,CHIP	18K	0.50%	1/16W
R181	1-216-809-11	METAL CHIP	100	5%	1/16W	R261	1-216-838-11	METAL CHIP	27K	5%	1/16W
R201	1-216-825-11	METAL CHIP	2.2K	5%	1/16W	R262	1-216-833-11	METAL CHIP	10K	5%	1/16W
R202	1-216-805-11	METAL CHIP	47	5%	1/16W	R265	1-216-864-11	METAL CHIP	0	5%	1/16W (DSR-40P)
R203	1-216-821-11	METAL CHIP	1K	5%	1/16W	R266	1-216-833-11	METAL CHIP	10K	5%	1/16W
R204	1-216-837-11	METAL CHIP	22K	5%	1/16W	R268	1-216-813-11	METAL CHIP	220	5%	1/16W
R205	1-216-839-11	METAL CHIP	33K	5%	1/16W	R269	1-218-841-11	RES,CHIP	560	0.50%	1/16W
R206	1-216-821-11	METAL CHIP	1K	5%	1/16W	R270	1-216-837-11	METAL CHIP	22K	5%	1/16W
R207	1-216-810-11	METAL CHIP	120	5%	1/16W	R271	1-216-837-11	METAL CHIP	22K	5%	1/16W
R208	1-216-821-11	METAL CHIP	1K	5%	1/16W	R272	1-216-833-11	METAL CHIP	10K	5%	1/16W
R209	1-216-825-11	METAL CHIP	2.2K	5%	1/16W	R275	1-216-864-11	METAL CHIP	0	5%	1/16W (DSR-40)
R210	1-216-823-11	METAL CHIP	1.5K	5%	1/16W	R276	1-216-828-11	METAL CHIP	3.9K	5%	1/16W
R211	1-216-817-11	METAL CHIP	470	5%	1/16W	R277	1-216-825-11	METAL CHIP	2.2K	5%	1/16W
R212	1-216-837-11	METAL CHIP	22K	5%	1/16W	R278	1-216-833-11	METAL CHIP	10K	5%	1/16W
R213	1-216-833-11	METAL CHIP	10K	5%	1/16W	R279	1-216-829-11	METAL CHIP	4.7K	5%	1/16W
R214	1-216-825-11	METAL CHIP	2.2K	5%	1/16W	R280	1-216-837-11	METAL CHIP	22K	5%	1/16W
R215	1-216-821-11	METAL CHIP	1K	5%	1/16W	R281	1-216-813-11	METAL CHIP	220	5%	1/16W
R216	1-216-821-11	METAL CHIP	1K	5%	1/16W	R282	1-216-833-11	METAL CHIP	10K	5%	1/16W
R217	1-218-877-11	RES,CHIP	18K	0.50%	1/16W	R283	1-218-863-11	RES,CHIP	4.7K	0.50%	1/16W
R218	1-216-838-11	METAL CHIP	27K	5%	1/16W	R284	1-218-707-11	RES,CHIP	4.3K	5%	1/16W
R219	1-216-821-11	METAL CHIP	1K	5%	1/16W	R285	1-218-269-11	RES,CHIP	360	5%	1/16W
R220	1-216-837-11	METAL CHIP	22K	5%	1/16W	R286	1-216-864-11	METAL CHIP	0	5%	1/16W (DSR-40)
R221	1-216-834-11	METAL CHIP	12K	5%	1/16W	R287	1-218-823-11	RES,CHIP	100	0.50%	1/16W
R222	1-216-821-11	METAL CHIP	1K	5%	1/16W	R288	1-216-826-11	METAL CHIP	2.7K	5%	1/16W
R223	1-216-817-11	METAL CHIP	470	5%	1/16W	R289	1-216-823-11	METAL CHIP	1.5K	5%	1/16W
R224	1-216-816-11	METAL CHIP	390	5%	1/16W	R290	1-216-842-11	METAL CHIP	56K	5%	1/16W
R225	1-216-821-11	METAL CHIP	1K	5%	1/16W	R291	1-216-839-11	METAL CHIP	33K	5%	1/16W
R226	1-216-807-11	METAL CHIP	68	5%	1/16W	R292	1-216-837-11	METAL CHIP	22K	5%	1/16W
R227	1-216-821-11	METAL CHIP	1K	5%	1/16W	R293	1-216-849-11	METAL CHIP	220K	5%	1/16W
R228	1-216-837-11	METAL CHIP	22K	5%	1/16W	R294	1-216-829-11	METAL CHIP	4.7K	5%	1/16W
R229	1-216-833-11	METAL CHIP	10K	5%	1/16W	R295	1-216-821-11	METAL CHIP	1K	5%	1/16W
R230	1-216-817-11	METAL CHIP	470	5%	1/16W	R296	1-216-809-11	METAL CHIP	100	5%	1/16W
R231	1-216-823-11	METAL CHIP	1.5K	5%	1/16W	R297	1-216-825-11	METAL CHIP	2.2K	5%	1/16W
R232	1-216-821-11	METAL CHIP	1K	5%	1/16W	R298	1-216-825-11	METAL CHIP	2.2K	5%	1/16W
R233	1-216-837-11	METAL CHIP	22K	5%	1/16W	R299	1-216-821-11	METAL CHIP	1K	5%	1/16W
R234	1-216-837-11	METAL CHIP	22K	5%	1/16W	R300	1-216-837-11	METAL CHIP	22K	5%	1/16W
R235	1-216-841-11	METAL CHIP	47K	5%	1/16W	R301	1-216-825-11	METAL CHIP	2.2K	5%	1/16W
R236	1-216-833-11	METAL CHIP	10K	5%	1/16W	R302	1-216-821-11	METAL CHIP	1K	5%	1/16W
R237	1-216-817-11	METAL CHIP	470	5%	1/16W	R303	1-216-823-11	METAL CHIP	1.5K	5%	1/16W
R238	1-216-809-11	METAL CHIP	100	5%	1/16W	R304	1-216-817-11	METAL CHIP	470	5%	1/16W
R239	1-216-829-11	METAL CHIP	4.7K	5%	1/16W	R305	1-218-843-11	RES,CHIP	680	0.50%	1/16W
R240	1-216-833-11	METAL CHIP	10K	5%	1/16W	R306	1-218-877-11	RES,CHIP	18K	0.50%	1/16W
R241	1-216-821-11	METAL CHIP	1K	5%	1/16W	R307	1-216-838-11	METAL CHIP	27K	5%	1/16W
R242	1-216-809-11	METAL CHIP	100	5%	1/16W	R308	1-216-821-11	METAL CHIP	1K	5%	1/16W
R243	1-216-821-11	METAL CHIP	1K	5%	1/16W	R309	1-216-864-11	METAL CHIP	0	5%	1/16W
R245	1-216-823-11	METAL CHIP	1.5K	5%	1/16W	R310	1-218-885-11	RES,CHIP	39K	0.50%	1/16W
R246	1-216-825-11	METAL CHIP	2.2K	5%	1/16W	R312	1-218-867-11	RES,CHIP	6.8K	0.50%	1/16W
R247	1-216-825-11	METAL CHIP	2.2K	5%	1/16W	R313	1-216-817-11	METAL CHIP	470	5%	1/16W
R248	1-218-831-11	RES,CHIP	220	0.50%	1/16W	R314	1-218-883-11	RES,CHIP	33K	0.50%	1/16W
R249	1-216-842-11	METAL CHIP	56K	5%	1/16W	R315	1-218-867-11	RES,CHIP	6.8K	0.50%	1/16W
R250	1-216-839-11	METAL CHIP	33K	5%	1/16W	R316	1-216-864-11	METAL CHIP	0	5%	1/16W
R251	1-216-809-11	METAL CHIP	100	5%	1/16W	R318	1-216-837-11	METAL CHIP	22K	5%	1/16W
R252	1-218-831-11	RES,CHIP	220	0.50%	1/16W						
R253	1-216-837-11	METAL CHIP	22K	5%	1/16W						
R254	1-216-845-11	METAL CHIP	100K	5%	1/16W						



Ref. No.	Part No.	Description			Remark	Ref. No.	Part No.	Description			Remark
R319	1-216-837-11	METAL CHIP	22K	5%	1/16W	R403	1-216-829-11	METAL CHIP	4.7K	5%	1/16W
R320	1-218-879-11	RES,CHIP	22K	0.50%	1/16W	R404	1-216-829-11	METAL CHIP	4.7K	5%	1/16W
R321	1-216-844-11	METAL CHIP	82K	5%	1/16W	R405	1-216-829-11	METAL CHIP	4.7K	5%	1/16W
R322	1-216-824-11	METAL CHIP	1.8K	5%	1/16W	R406	1-216-829-11	METAL CHIP	4.7K	5%	1/16W
R323	1-218-869-11	RES,CHIP	8.2K	0.50%	1/16W	R407	1-216-827-11	METAL CHIP	3.3K	5%	1/16W
R324	1-216-833-11	METAL CHIP	10K	5%	1/16W	R408	1-216-821-11	METAL CHIP	1K	5%	1/16W
R325	1-216-817-11	METAL CHIP	470	5%	1/16W	R409	1-218-863-11	RES,CHIP	4.7K	0.50%	1/16W
R326	1-218-871-11	RES,CHIP	10K	0.50%	1/16W	R410	1-218-861-11	RES,CHIP	3.9K	0.50%	1/16W
R327	1-216-833-11	METAL CHIP	10K	5%	1/16W (DSR-40)	R411	1-216-836-11	METAL CHIP	18K	5%	1/16W
R328	1-216-821-11	METAL CHIP	1K	5%	1/16W	R412	1-216-838-11	METAL CHIP	27K	5%	1/16W
R329	1-216-829-11	METAL CHIP	4.7K	5%	1/16W	R413	1-216-836-11	METAL CHIP	18K	5%	1/16W
R330	1-216-853-11	METAL CHIP	470K	5%	1/16W	R414	1-216-838-11	METAL CHIP	27K	5%	1/16W
R331	1-216-833-11	METAL CHIP	10K	5%	1/16W	R415	1-216-829-11	METAL CHIP	4.7K	5%	1/16W
R332	1-218-843-11	RES,CHIP	680	0.50%	1/16W	R416	1-216-825-11	METAL CHIP	2.2K	5%	1/16W
R333	1-216-829-11	METAL CHIP	4.7K	5%	1/16W	R417	1-218-847-11	RES,CHIP	1K	0.50%	1/16W
R334	1-216-805-11	METAL CHIP	47	5%	1/16W (DSR-40)	R418	1-218-847-11	RES,CHIP	1K	0.50%	1/16W
R334	1-216-806-11	RES,CHIP	56	5%	1/16W (DSR-40P)	R419	1-216-825-11	METAL CHIP	2.2K	5%	1/16W
R335	1-216-815-11	METAL CHIP	330	5%	1/16W (DSR-40)	R420	1-218-863-11	RES,CHIP	4.7K	0.50%	1/16W
R335	1-216-809-11	METAL CHIP	100	5%	1/16W (DSR-40P)	R421	1-216-837-11	METAL CHIP	22K	5%	1/16W
R336	1-216-829-11	METAL CHIP	4.7K	5%	1/16W	R422	1-216-837-11	METAL CHIP	22K	5%	1/16W
R337	1-216-864-11	METAL CHIP	0	5%	1/16W (DSR-40P)	R423	1-216-837-11	METAL CHIP	22K	5%	1/16W
R338	1-216-864-11	METAL CHIP	0	5%	1/16W (DSR-40)	R424	1-216-837-11	METAL CHIP	22K	5%	1/16W
R339	1-216-837-11	METAL CHIP	22K	5%	1/16W	R425	1-216-829-11	METAL CHIP	4.7K	5%	1/16W
R340	1-216-842-11	METAL CHIP	56K	5%	1/16W	R426	1-218-862-11	RES,CHIP	4.3K	0.50%	1/16W
R341	1-216-839-11	METAL CHIP	33K	5%	1/16W	R427	1-216-833-11	METAL CHIP	10K	5%	1/16W
R342	1-216-837-11	METAL CHIP	22K	5%	1/16W	R428	1-216-833-11	METAL CHIP	10K	5%	1/16W
R343	1-216-837-11	METAL CHIP	22K	5%	1/16W	R429	1-216-829-11	METAL CHIP	4.7K	5%	1/16W
R344	1-216-837-11	METAL CHIP	22K	5%	1/16W	R430	1-216-837-11	METAL CHIP	22K	5%	1/16W
R345	1-216-845-11	METAL CHIP	100K	5%	1/16W	R431	1-216-842-11	METAL CHIP	56K	5%	1/16W
R346	1-216-825-11	METAL CHIP	2.2K	5%	1/16W	R432	1-216-839-11	METAL CHIP	33K	5%	1/16W
R347	1-216-837-11	METAL CHIP	22K	5%	1/16W	R433	1-216-837-11	METAL CHIP	22K	5%	1/16W
R348	1-218-841-11	RES,CHIP	560	0.50%	1/16W	R434	1-216-842-11	METAL CHIP	56K	5%	1/16W
R349	1-218-833-11	RES,CHIP	270	0.50%	1/16W	R435	1-216-839-11	METAL CHIP	33K	5%	1/16W
R350	1-218-851-11	RES,CHIP	1.5K	0.50%	1/16W	R436	1-216-829-11	METAL CHIP	4.7K	5%	1/16W
R351	1-216-821-11	METAL CHIP	1K	5%	1/16W	R437	1-216-829-11	METAL CHIP	4.7K	5%	1/16W
R352	1-216-840-11	METAL CHIP	39K	5%	1/16W (DSR-40P)	R438	1-216-829-11	METAL CHIP	4.7K	5%	1/16W
R353	1-218-841-11	RES,CHIP	560	0.50%	1/16W	R439	1-216-829-11	METAL CHIP	4.7K	5%	1/16W
R354	1-216-825-11	METAL CHIP	2.2K	5%	1/16W	R440	1-216-829-11	METAL CHIP	4.7K	5%	1/16W
R355	1-216-837-11	METAL CHIP	22K	5%	1/16W	R441	1-216-829-11	METAL CHIP	4.7K	5%	1/16W
R356	1-216-839-11	METAL CHIP	33K	5%	1/16W (DSR-40P)	R442	1-216-833-11	METAL CHIP	10K	5%	1/16W
R357	1-216-822-11	METAL CHIP	1.2K	5%	1/16W	R443	1-216-833-11	METAL CHIP	10K	5%	1/16W
R358	1-216-823-11	METAL CHIP	1.5K	5%	1/16W	R444	1-216-833-11	METAL CHIP	10K	5%	1/16W
R359	1-216-825-11	METAL CHIP	2.2K	5%	1/16W	R445	1-216-829-11	METAL CHIP	4.7K	5%	1/16W
R364	1-216-821-11	METAL CHIP	1K	5%	1/16W	R446	1-216-825-11	METAL CHIP	2.2K	5%	1/16W
R367	1-216-821-11	METAL CHIP	1K	5%	1/16W	R447	1-216-829-11	METAL CHIP	4.7K	5%	1/16W
R368	1-216-821-11	METAL CHIP	1K	5%	1/16W	R448	1-216-829-11	METAL CHIP	4.7K	5%	1/16W
R369	1-218-875-11	RES,CHIP	15K	0.50%	1/16W	R449	1-216-829-11	METAL CHIP	4.7K	5%	1/16W
R370	1-218-869-11	RES,CHIP	8.2K	0.50%	1/16W	R450	1-218-827-11	RES,CHIP	150	0.50%	1/16W
R371	1-218-869-11	RES,CHIP	8.2K	0.50%	1/16W	R451	1-216-829-11	METAL CHIP	4.7K	5%	1/16W
R401	1-216-829-11	METAL CHIP	4.7K	5%	1/16W	R452	1-216-825-11	METAL CHIP	2.2K	5%	1/16W (DSR-40)
R402	1-216-829-11	METAL CHIP	4.7K	5%	1/16W	R452	1-216-823-11	METAL CHIP	1.5K	5%	1/16W (DSR-40P)
						R453	1-216-827-11	METAL CHIP	3.3K	5%	1/16W
						R454	1-216-826-11	METAL CHIP	2.7K	5%	1/16W (DSR-40)
						R454	1-216-825-11	METAL CHIP	2.2K	5%	1/16W (DSR-40P)
						R455	1-216-825-11	METAL CHIP	2.2K	5%	1/16W
						R456	1-216-827-11	METAL CHIP	3.3K	5%	1/16W
						R457	1-218-827-11	RES,CHIP	150	0.50%	1/16W

Ref. No.	Part No.	Description			Remark	Ref. No.	Part No.	Description			Remark
R458	1-216-821-11	METAL CHIP	1K	5%	1/16W	R515	1-216-827-11	METAL CHIP	3.3K	5%	1/16W
R459	1-216-829-11	METAL CHIP	4.7K	5%	1/16W						
R460	1-216-825-11	METAL CHIP	2.2K	5%	1/16W	R516	1-218-859-11	RES,CHIP	3.3K	0.50%	1/16W
R461	1-216-827-11	METAL CHIP	3.3K	5%	1/16W	R517	1-216-826-11	METAL CHIP	2.7K	5%	1/16W
R462	1-216-829-11	METAL CHIP	4.7K	5%	1/16W	R518	1-216-827-11	METAL CHIP	3.3K	5%	1/16W
						R519	1-216-841-11	METAL CHIP	47K	5%	1/16W
R463	1-216-829-11	METAL CHIP	4.7K	5%	1/16W	R521	1-218-827-11	RES,CHIP	150	0.50%	1/16W
R464	1-218-847-11	RES,CHIP	1K	0.50%	1/16W						
R465	1-218-847-11	RES,CHIP	1K	0.50%	1/16W	R522	1-218-827-11	RES,CHIP	150	0.50%	1/16W
R466	1-216-829-11	METAL CHIP	4.7K	5%	1/16W	R523	1-216-842-11	METAL CHIP	56K	5%	1/16W
R467	1-218-863-11	RES,CHIP	4.7K	0.50%	1/16W	R524	1-216-842-11	METAL CHIP	56K	5%	1/16W
						R525	1-216-833-11	METAL CHIP	10K	5%	1/16W
R468	1-216-829-11	METAL CHIP	4.7K	5%	1/16W	R526	1-216-841-11	METAL CHIP	47K	5%	1/16W
R469	1-218-827-11	RES,CHIP	150	0.50%	1/16W						
R470	1-218-861-11	RES,CHIP	3.9K	0.50%	1/16W	R527	1-218-855-11	RES,CHIP	2.2K	0.50%	1/16W
R471	1-218-861-11	RES,CHIP	3.9K	0.50%	1/16W	R528	1-218-855-11	RES,CHIP	2.2K	0.50%	1/16W
R472	1-218-827-11	RES,CHIP	150	0.50%	1/16W	R529	1-216-833-11	METAL CHIP	10K	5%	1/16W
						R530	1-216-817-11	METAL CHIP	470	5%	1/16W
R473	1-216-825-11	METAL CHIP	2.2K	5%	1/16W	R531	1-216-842-11	METAL CHIP	56K	5%	1/16W
R474	1-218-863-11	RES,CHIP	4.7K	0.50%	1/16W						
R475	1-218-863-11	RES,CHIP	4.7K	0.50%	1/16W	R532	1-216-833-11	METAL CHIP	10K	5%	1/16W
R476	1-218-863-11	RES,CHIP	4.7K	0.50%	1/16W	R533	1-216-828-11	METAL CHIP	3.9K	5%	1/16W
R477	1-216-837-11	METAL CHIP	22K	5%	1/16W	R534	1-216-847-11	METAL CHIP	150K	5%	1/16W
						R535	1-216-825-11	METAL CHIP	2.2K	5%	1/16W
R478	1-216-842-11	METAL CHIP	56K	5%	1/16W	R536	1-216-818-11	METAL CHIP	560	5%	1/16W
R479	1-216-839-11	METAL CHIP	33K	5%	1/16W						
R480	1-218-831-11	RES,CHIP	220	0.50%	1/16W	R537	1-216-829-11	METAL CHIP	4.7K	5%	1/16W
R481	1-218-831-11	RES,CHIP	220	0.50%	1/16W	R538	1-218-847-11	RES,CHIP	1K	0.50%	1/16W
R482	1-218-831-11	RES,CHIP	220	0.50%	1/16W	R539	1-216-821-11	METAL CHIP	1K	5%	1/16W
						R540	1-218-848-11	RES,CHIP	1.1K	0.50%	1/16W
R483	1-216-829-11	METAL CHIP	4.7K	5%	1/16W	R541	1-218-873-11	RES,CHIP	12K	0.50%	1/16W
R484	1-216-825-11	METAL CHIP	2.2K	5%	1/16W						
R485	1-218-831-11	RES,CHIP	220	0.50%	1/16W	R542	1-216-823-11	METAL CHIP	1.5K	5%	1/16W
R486	1-218-831-11	RES,CHIP	220	0.50%	1/16W	R543	1-216-821-11	METAL CHIP	1K	5%	1/16W
R487	1-218-831-11	RES,CHIP	220	0.50%	1/16W	R545	1-216-864-11	METAL CHIP	0	5%	1/16W
						R546	1-216-864-11	METAL CHIP	0	5%	1/16W
R488	1-218-827-11	RES,CHIP	150	0.50%	1/16W	R547	1-216-822-11	METAL CHIP	1.2K	5%	1/16W
R489	1-216-837-11	METAL CHIP	22K	5%	1/16W						
					(DSR-40P)	R548	1-216-821-11	METAL CHIP	1K	5%	1/16W
R490	1-218-827-11	RES,CHIP	150	0.50%	1/16W	R549	1-218-855-11	RES,CHIP	2.2K	0.50%	1/16W
R491	1-216-842-11	METAL CHIP	56K	5%	1/16W	R550	1-216-821-11	METAL CHIP	1K	5%	1/16W
					(DSR-40P)	R551	1-216-821-11	METAL CHIP	1K	5%	1/16W
						R552	1-216-822-11	METAL CHIP	1.2K	5%	1/16W
R492	1-216-839-11	METAL CHIP	33K	5%	1/16W						
					(DSR-40P)	R553	1-218-863-11	RES,CHIP	4.7K	0.50%	1/16W
R493	1-218-827-11	RES,CHIP	150	0.50%	1/16W	R554	1-216-833-11	METAL CHIP	10K	5%	1/16W
R494	1-218-827-11	RES,CHIP	150	0.50%	1/16W	R555	1-216-833-11	METAL CHIP	10K	5%	1/16W
R495	1-216-829-11	METAL CHIP	4.7K	5%	1/16W	R556	1-216-864-11	METAL CHIP	0	5%	1/16W
						R557	1-216-864-11	METAL CHIP	0	5%	1/16W
R496	1-216-829-11	METAL CHIP	4.7K	5%	1/16W						
R497	1-216-829-11	METAL CHIP	4.7K	5%	1/16W	R558	1-218-831-11	RES,CHIP	220	0.50%	1/16W
R498	1-216-829-11	METAL CHIP	4.7K	5%	1/16W	R559	1-218-831-11	RES,CHIP	220	0.50%	1/16W
R499	1-216-829-11	METAL CHIP	4.7K	5%	1/16W	R560	1-216-864-11	METAL CHIP	0	5%	1/16W
R500	1-216-829-11	METAL CHIP	4.7K	5%	1/16W	R561	1-216-864-11	METAL CHIP	0	5%	1/16W
						R562	1-216-864-11	METAL CHIP	0	5%	1/16W
R501	1-218-857-11	RES,CHIP	2.7K	0.50%	1/16W						
R502	1-218-867-11	RES,CHIP	6.8K	0.50%	1/16W	R563	1-216-821-11	METAL CHIP	1K	5%	1/16W
R503	1-216-829-11	METAL CHIP	4.7K	5%	1/16W	R564	1-216-833-11	METAL CHIP	10K	5%	1/16W
					(DSR-40P)	R566	1-216-821-11	METAL CHIP	1K	5%	1/16W
R504	1-216-825-11	METAL CHIP	2.2K	5%	1/16W	R567	1-216-823-11	METAL CHIP	1.5K	5%	1/16W
					(DSR-40P)	R568	1-216-829-11	METAL CHIP	4.7K	5%	1/16W
R505	1-216-825-11	METAL CHIP	2.2K	5%	1/16W	R569	1-216-829-11	METAL CHIP	4.7K	5%	1/16W
R506	1-218-859-11	RES,CHIP	3.3K	0.50%	1/16W	R570	1-216-829-11	METAL CHIP	4.7K	5%	1/16W
R507	1-218-827-11	RES,CHIP	150	0.50%	1/16W	R571	1-216-833-11	METAL CHIP	10K	5%	1/16W
R508	1-218-827-11	RES,CHIP	150	0.50%	1/16W	R572	1-216-833-11	METAL CHIP	10K	5%	1/16W
R509	1-218-867-11	RES,CHIP	6.8K	0.50%	1/16W	R573	1-216-833-11	METAL CHIP	10K	5%	1/16W
R510	1-218-857-11	RES,CHIP	2.7K	0.50%	1/16W	R574	1-216-842-11	METAL CHIP	56K	5%	1/16W
R511	1-218-851-11	RES,CHIP	1.5K	0.50%	1/16W	R575	1-216-839-11	METAL CHIP	33K	5%	1/16W
R512	1-216-826-11	METAL CHIP	2.7K	5%	1/16W	R576	1-216-844-11	METAL CHIP	82K	5%	1/16W
R514	1-216-825-11	METAL CHIP	2.2K	5%	1/16W	R577	1-216-839-11	METAL CHIP	33K	5%	1/16W

Ref. No.	Part No.	Description			Remark	Ref. No.	Part No.	Description			Remark
R578	1-216-842-11	METAL CHIP	56K	5%	1/16W	R674	1-216-864-11	METAL CHIP	0	5%	1/16W
R579	1-216-840-11	METAL CHIP	39K	5%	1/16W (DSR-40)	R675	1-216-864-11	METAL CHIP	0	5%	1/16W
R579	1-216-839-11	METAL CHIP	33K	5%	1/16W (DSR-40P)	R676	1-216-864-11	METAL CHIP	0	5%	1/16W
R580	1-216-837-11	METAL CHIP	22K	5%	1/16W	R677	1-216-833-11	METAL CHIP	10K	5%	1/16W
R581	1-216-837-11	METAL CHIP	22K	5%	1/16W	R678	1-216-833-11	METAL CHIP	10K	5%	1/16W
R582	1-216-837-11	METAL CHIP	22K	5%	1/16W	R852	1-216-864-11	METAL CHIP	0	5%	1/16W
R584	1-216-864-11	METAL CHIP	0	5%	1/16W	R853	1-216-864-11	METAL CHIP	0	5%	1/16W
R585	1-216-825-11	METAL CHIP	2.2K	5%	1/16W	R854	1-216-864-11	METAL CHIP	0	5%	1/16W
R586	1-218-863-11	RES,CHIP	4.7K	0.50%	1/16W	R855	1-216-864-11	METAL CHIP	0	5%	1/16W
R591	1-218-831-11	METAL CHIP	220	0.50%	1/16W	R856	1-216-864-11	METAL CHIP	0	5%	1/16W
R592	1-216-864-11	METAL CHIP	0	5%	1/16W	R857	1-216-166-00	RES,CHIP	47	5%	1/8W
R601	1-216-841-11	METAL CHIP	47K	5%	1/16W	R858	1-216-166-00	RES,CHIP	47	5%	1/8W
R602	1-216-841-11	METAL CHIP	47K	5%	1/16W	R859	1-216-801-11	METAL CHIP	22	5%	1/16W
R603	1-216-813-11	METAL CHIP	220	5%	1/16W	R860	1-216-841-11	METAL CHIP	47K	5%	1/16W
R604	1-216-849-11	METAL CHIP	220K	5%	1/16W	R861	1-216-864-11	METAL CHIP	0	5%	1/16W (DSR-40P)
R605	1-216-837-11	METAL CHIP	22K	5%	1/16W	R862	1-216-821-11	METAL CHIP	1K	5%	1/16W
R606	1-216-839-11	METAL CHIP	33K	5%	1/16W	R863	1-216-833-11	METAL CHIP	10K	5%	1/16W
R610	1-216-817-11	METAL CHIP	470	5%	1/16W	R864	1-216-833-11	METAL CHIP	10K	5%	1/16W
R611	1-216-816-11	METAL CHIP	390	5%	1/16W	R865	1-216-833-11	METAL CHIP	10K	5%	1/16W
R612	1-216-821-11	METAL CHIP	1K	5%	1/16W	R866	1-216-833-11	METAL CHIP	10K	5%	1/16W
R613	1-216-817-11	METAL CHIP	470	5%	1/16W	R867	1-216-833-11	METAL CHIP	10K	5%	1/16W
R616	1-216-821-11	METAL CHIP	1K	5%	1/16W	R868	1-216-829-11	METAL CHIP	4.7K	5%	1/16W
R619	1-216-815-11	METAL CHIP	330	5%	1/16W	R869	1-216-817-11	METAL CHIP	470	5%	1/16W
R621	1-216-821-11	METAL CHIP	1K	5%	1/16W	R870	1-216-817-11	METAL CHIP	470	5%	1/16W
R622	1-216-833-11	METAL CHIP	10K	5%	1/16W	R871	1-216-817-11	METAL CHIP	470	5%	1/16W
R623	1-216-853-11	METAL CHIP	470K	5%	1/16W	R872	1-216-817-11	METAL CHIP	470	5%	1/16W
R629	1-216-833-11	METAL CHIP	10K	5%	1/16W	R873	1-216-817-11	METAL CHIP	470	5%	1/16W
R630	1-216-836-11	METAL CHIP	18K	5%	1/16W	R874	1-216-864-11	METAL CHIP	0	5%	1/16W
R631	1-216-837-11	METAL CHIP	22K	5%	1/16W	R875	1-216-817-11	METAL CHIP	470	5%	1/16W
R636	1-216-833-11	METAL CHIP	10K	5%	1/16W	R876	1-216-817-11	METAL CHIP	470	5%	1/16W
R639	1-216-821-11	METAL CHIP	1K	5%	1/16W	R877	1-216-817-11	METAL CHIP	470	5%	1/16W
R640	1-216-841-11	METAL CHIP	47K	5%	1/16W	R878	1-216-817-11	METAL CHIP	470	5%	1/16W
R641	1-216-841-11	METAL CHIP	47K	5%	1/16W	R879	1-216-817-11	METAL CHIP	470	5%	1/16W
R642	1-216-821-11	METAL CHIP	1K	5%	1/16W	R880	1-216-817-11	METAL CHIP	470	5%	1/16W
R643	1-216-845-11	METAL CHIP	100K	5%	1/16W	R881	1-216-817-11	METAL CHIP	470	5%	1/16W
R651	1-216-831-11	METAL CHIP	6.8K	5%	1/16W	R882	1-216-817-11	METAL CHIP	470	5%	1/16W
R652	1-216-834-11	METAL CHIP	12K	5%	1/16W	R883	1-216-817-11	METAL CHIP	470	5%	1/16W
R653	1-216-825-11	METAL CHIP	2.2K	5%	1/16W	R884	1-216-817-11	METAL CHIP	470	5%	1/16W
R654	1-216-821-11	METAL CHIP	1K	5%	1/16W	R885	1-216-817-11	METAL CHIP	470	5%	1/16W
R655	1-216-833-11	METAL CHIP	10K	5%	1/16W	R886	1-216-817-11	METAL CHIP	470	5%	1/16W
R656	1-216-821-11	METAL CHIP	1K	5%	1/16W	R887	1-216-817-11	METAL CHIP	470	5%	1/16W
R657	1-216-835-11	METAL CHIP	15K	5%	1/16W	R888	1-216-817-11	METAL CHIP	470	5%	1/16W
R658	1-216-839-11	METAL CHIP	33K	5%	1/16W	R889	1-216-817-11	METAL CHIP	470	5%	1/16W
R659	1-216-817-11	METAL CHIP	470	5%	1/16W	R890	1-216-817-11	METAL CHIP	470	5%	1/16W
R660	1-216-864-11	METAL CHIP	0	5%	1/16W	R891	1-216-817-11	METAL CHIP	470	5%	1/16W
R661	1-216-828-11	METAL CHIP	3.9K	5%	1/16W	R892	1-216-817-11	METAL CHIP	470	5%	1/16W
R662	1-216-847-11	METAL CHIP	150K	5%	1/16W	R893	1-216-817-11	METAL CHIP	470	5%	1/16W
R663	1-216-864-11	METAL CHIP	0	5%	1/16W	R894	1-216-827-11	METAL CHIP	3.3K	5%	1/16W
R664	1-216-818-11	METAL CHIP	560	5%	1/16W	R895	1-216-829-11	METAL CHIP	4.7K	5%	1/16W
R665	1-216-864-11	METAL CHIP	0	5%	1/16W	R897	1-216-817-11	METAL CHIP	470	5%	1/16W
R666	1-218-831-11	RES,CHIP	220	0.50%	1/16W	R898	1-216-817-11	METAL CHIP	470	5%	1/16W
R667	1-218-831-11	RES,CHIP	220	0.50%	1/16W	R899	1-216-833-11	METAL CHIP	10K	5%	1/16W
R668	1-216-833-11	METAL CHIP	10K	5%	1/16W	R900	1-216-817-11	METAL CHIP	470	5%	1/16W
R669	1-218-827-11	RES,CHIP	150	0.50%	1/16W	R901	1-216-817-11	METAL CHIP	470	5%	1/16W
R670	1-216-864-11	METAL CHIP	0	5%	1/16W	R902	1-216-864-11	METAL CHIP	0	5%	1/16W
R671	1-216-864-11	METAL CHIP	0	5%	1/16W	R903	1-216-817-11	METAL CHIP	470	5%	1/16W
R672	1-218-827-11	RES,CHIP	150	0.50%	1/16W	R904	1-216-864-11	METAL CHIP	0	5%	1/16W
R673	1-216-864-11	METAL CHIP	0	5%	1/16W	R905	1-216-817-11	METAL CHIP	470	5%	1/16W
						R906	1-216-833-11	METAL CHIP	10K	5%	1/16W

Ref. No.	Part No.	Description			Remark	Ref. No.	Part No.	Description			Remark
R907	1-216-864-11	METAL CHIP	0	5%	1/16W	R972	1-216-864-11	METAL CHIP	0	5%	1/16W
R908	1-216-817-11	METAL CHIP	470	5%	1/16W	R973	1-216-864-11	METAL CHIP	0	5%	1/16W
R909	1-216-833-11	METAL CHIP	10K	5%	1/16W	R974	1-216-864-11	METAL CHIP	0	5%	1/16W
R910	1-216-833-11	METAL CHIP	10K	5%	1/16W	R975	1-216-864-11	METAL CHIP	0	5%	1/16W
R911	1-216-864-11	METAL CHIP	0	5%	1/16W	R976	1-216-864-11	METAL CHIP	0	5%	1/16W
R912	1-216-817-11	METAL CHIP	470	5%	1/16W	R977	1-216-864-11	METAL CHIP	0	5%	1/16W
R913	1-216-833-11	METAL CHIP	10K	5%	1/16W	R980	1-216-844-11	METAL CHIP	82K	5%	1/16W
R914	1-216-833-11	METAL CHIP	10K	5%	1/16W	R981	1-216-864-11	METAL CHIP	0	5%	1/16W
R915	1-216-864-11	METAL CHIP	0	5%	1/16W	R982	1-216-864-11	METAL CHIP	0	5%	1/16W
R916	1-216-817-11	METAL CHIP	470	5%	1/16W	R983	1-216-837-11	METAL CHIP	22K	5%	1/16W
R917	1-216-833-11	METAL CHIP	10K	5%	1/16W	R984	1-216-821-11	METAL CHIP	1K	5%	1/16W
R918	1-216-833-11	METAL CHIP	10K	5%	1/16W	R985	1-216-833-11	METAL CHIP	10K	5%	1/16W
R919	1-216-864-11	METAL CHIP	0	5%	1/16W	R987	1-216-844-11	METAL CHIP	82K	5%	1/16W
R920	1-216-833-11	METAL CHIP	10K	5%	1/16W	R988	1-216-853-11	METAL CHIP	470K	5%	1/16W
R921	1-216-864-11	METAL CHIP	0	5%	1/16W	R989	1-216-805-11	METAL CHIP	47	5%	1/16W
R922	1-216-833-11	METAL CHIP	10K	5%	1/16W	R991	1-216-826-11	METAL CHIP	2.7K	5%	1/16W
R923	1-216-864-11	METAL CHIP	0	5%	1/16W	R993	1-216-037-00	METAL CHIP	330	5%	1/10W
R924	1-216-817-11	METAL CHIP	470	5%	1/16W	R994	1-216-833-11	METAL CHIP	10K	5%	1/16W
R925	1-216-817-11	METAL CHIP	470	5%	1/16W	R995	1-216-833-11	METAL CHIP	10K	5%	1/16W
R926	1-216-817-11	METAL CHIP	470	5%	1/16W	R996	1-216-061-00	METAL CHIP	3.3K	5%	1/10W
R927	1-216-817-11	METAL CHIP	470	5%	1/16W	R998	1-216-801-11	METAL CHIP	22	5%	1/16W
R928	1-216-817-11	METAL CHIP	470	5%	1/16W	R1017	1-216-817-11	METAL CHIP	470	5%	1/16W
R929	1-216-817-11	METAL CHIP	470	5%	1/16W			< TEST PIN >			
R930	1-216-817-11	METAL CHIP	470	5%	1/16W	TP201	1-535-757-11	CHIP, CHECKER			
R931	1-216-817-11	METAL CHIP	470	5%	1/16W	TP202	1-535-757-11	CHIP, CHECKER			
R932	1-216-833-11	METAL CHIP	10K	5%	1/16W	TP858	1-535-757-11	CHIP, CHECKER			
R933	1-216-817-11	METAL CHIP	470	5%	1/16W	TP859	1-535-757-11	CHIP, CHECKER			
R934	1-216-817-11	METAL CHIP	470	5%	1/16W			< VIBRATOR >			
R935	1-216-833-11	METAL CHIP	10K	5%	1/16W	X201	1-579-738-21	VIBRATOR, CRYSTAL (14.31818MHz)(DSR-40			
R936	1-216-817-11	METAL CHIP	470	5%	1/16W	X201	1-579-780-21	VIBRATOR, CRYSTAL (17.734475MHz)			
R937	1-216-817-11	METAL CHIP	470	5%	1/16W						(DSR-40P)
R938	1-216-817-11	METAL CHIP	470	5%	1/16W	X401	1-577-165-11	VIBLATOR, CERAMIC (500kHz)			
R939	1-216-841-11	METAL CHIP	47K	5%	1/16W	X402	1-567-900-11	OSCILLATOR, CRYSTAL (14.31818MHz)			
R941	1-216-845-11	METAL CHIP	100K	5%	1/16W						(DSR-40
R942	1-216-845-11	METAL CHIP	100K	5%	1/16W	X402	1-567-733-11	VIBRATOR, CRYSTAL (17.734475MHz)			
R943	1-216-817-11	METAL CHIP	470	5%	1/16W						(DSR-40P)
R944	1-216-817-11	METAL CHIP	470	5%	1/16W	X601	1-579-466-11	VIBRATOR, CRYSTAL (3.579545MHz)(DSR-40)			
R945	1-216-817-11	METAL CHIP	470	5%	1/16W	X601	1-579-661-21	OSCILLATOR, CRYSTAL (4.433619MHz)			
R946	1-216-817-11	METAL CHIP	470	5%	1/16W						(DSR-40P)
R947	1-216-817-11	METAL CHIP	470	5%	1/16W	X651	1-567-900-11	OSCILLATOR, CRYSTAL (14.31818MHz)			
R948	1-216-833-11	METAL CHIP	10K	5%	1/16W						(DSR-40)
R949	1-216-817-11	METAL CHIP	470	5%	1/16W	X651	1-567-733-11	VIBRATOR, CRYSTAL (17.734475MHz)			
R950	1-216-817-11	METAL CHIP	470	5%	1/16W						(DSR-40P)
R951	1-216-817-11	METAL CHIP	470	5%	1/16W	X652	1-577-165-11	VIBLATOR, CERAMIC (500kHz)			
R952	1-216-841-11	METAL CHIP	47K	5%	1/16W	X851	1-767-450-11	VIBRATOR, CERAMIC (20MHz)			
R953	1-216-841-11	METAL CHIP	47K	5%	1/16W	X852	1-760-458-21	VIBRATOR, CRYSTAL (32.798kHz)			
R954	1-216-841-11	METAL CHIP	47K	5%	1/16W	X853	1-760-458-21	VIBRATOR, CRYSTAL (32.798kHz)			
R955	1-216-841-11	METAL CHIP	47K	5%	1/16W						
R956	1-216-841-11	METAL CHIP	47K	5%	1/16W						
R957	1-216-841-11	METAL CHIP	47K	5%	1/16W						
R958	1-216-833-11	METAL CHIP	10K	5%	1/16W						
R959	1-216-833-11	METAL CHIP	10K	5%	1/16W						
R960	1-216-833-11	METAL CHIP	10K	5%	1/16W						
R962	1-216-154-00	RES,CHIP	15	5%	1/8W	55	1-790-556-11	CABLE, FLAT (FVH-5)			
R963	1-216-154-00	RES,CHIP	15	5%	1/8W	56	1-782-825-11	CABLE, FLAT (FVF-8)			
R964	1-219-570-11	RES,CHIP	10M	5%	1/16W	57	1-782-824-11	CABLE, FLAT (FVJ-7)			
						60	1-959-583-11	HARNESS (VP-73)			
						62	1-790-557-11	CABLE, FLAT (FVR-12)			
R965	1-216-817-11	METAL CHIP	470	5%	1/16W						
R966	1-216-864-11	METAL CHIP	0	5%	1/16W	63	1-959-585-11	HARNESS (HR-62)			
R967	1-216-864-11	METAL CHIP	0	5%	1/16W	64	1-959-586-11	HARNESS (CR-111)			
R971	1-216-864-11	METAL CHIP	0	5%	1/16W						

# VA-106

Ref. No.	Part No.	Description	Remark
△66	1-958-585-11	HARNESS (AC-227)	
72	1-790-725-11	CABLE, FLAT (FVG-1)	
74	1-782-822-11	CABLE, FLAT (FVR-9)	
101	1-776-148-11	CABLE, FLAT (FCM-11) 15P	
102	1-776-145-11	CABLE, FLAT (FCM-8) 16P	
105	1-764-137-11	CONNECTOR, TRANSLATION 15P	
113	1-958-288-11	HARNESS (CM-130)	
114	1-776-151-11	CABLE, FLAT (FCM-12) 14P	
115	1-776-147-11	CABLE, FLAT (FCM-10) 15P	
116	1-776-146-11	CABLE, FLAT (FCM-9) 9P	
117	1-958-057-11	HARNESS (CP-79)	
118	1-958-061-11	HARNESS (VJ-103)	
119	1-958-058-11	HARNESS (JP-55)	
120	1-959-584-11	HARNESS (JH-51)	
121	1-543-793-11	FILTER, CLAMP (FERRITE CORE)	
755	A-7044-015-A	DRUM ASSY (DEH-08B-R)	
851	1-658-990-11	FP-406 FLEXIBLE BOARD	
CN901	1-770-312-21	CONNECTOR 4P	
M901	X-3944-897-2	FPC ASSY, MOTOR	
M902	8-835-545-01	MOTOR, DC SCD11A/J-N (CAPSTAN)	
M903	X-3945-784-1	MOTOR ASSY, LM (LOADING)	
M904	8-835-537-01	MOTOR, DC SRD11A/J-N (REEL)	
M905	1-698-534-31	FAN, DC	
S001	1-762-550-11	SWITCH, ROTARY (MODE)	
S901	1-762-551-11	SWITCH, PUSH (REC PROOF)	
S902	1-572-288-11	SWITCH, PUSH (C IN SW)	

## \*\*\*\*\* HARDWARE LIST \*\*\*\*\*

#1	7-685-533-19	SCREW +BTP 2.6X6 TYPE2 N-S
#2	7-682-552-09	SCREW +P 3X16
#3	7-682-547-09	SCREW +B 3X6
#4	7-685-132-19	SCREW +P 2.6X5 TYPE2 NON-SLIT
#6	7-628-253-20	SCREW +PS 2X6
#7	7-682-646-09	SCREW +PS 3X5
#8	7-628-253-00	SCREW +PS 2X4
#9	7-627-553-37	SCREW (M2X3), SPECIAL HEAD
#10	7-685-871-01	SCREW +BVTT 3X6 (S TIGHT)

## ACCESSORIES \*\*\*\*\*

△	1-551-812-11	CORD, POWER (DSR-40)
△	1-782-929-11	CORD, POWER SUPPLY (BS 3P) (DSR-40P)
	3-865-349-11	MANUAL, INSTRUCTION (ENGLISH, FRENCH)
	3-865-349-21	MANUAL, INSTRUCTION (GERMAN, ITALIAN) (DSR-40P)